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CLOSING OF THE RIFT BETWEEN SCIENCE AND RELIGION

Today signs of a closer rapprochement between religion and science are everywhere apparent. To single out a few of the more salient: the public professions of religious faith by such scientists as Robert Millikan and Max Planck; Alexis Carrel's reverent book, "Man the Unknown," the renaissance of Thomistic metaphysics in Chicago University through the inspiration of President Hutchins and Professor Adler. On religion's side we note the rejuvenation of the Papal Academy of Sciences by Pope Pius XI, and his appointment to membership in it of great non-Catholic scientists like Millikan, T. H. Morgan, and Planck. By this act the Holy Father—to put the matter in his own words—wished to signify to the world that "the Church blesses every healthy initiative and has no fear of progress, even the most daring progress, of science, if only it be true science."

To be sure, this is only as it should be; for are not science and religion animated by a common passion: unflinching loyalty to truth? Still, it is in pleasant contrast to the hostility that embittered their relations during the last three centuries. What factors are responsible for the happy change?

In the domain of religion, I attribute it to the clear demarcation of the boundaries of faith and knowledge by Gregory XVI (1831-1846), the Vatican Council (1869-1870), and Leo XIII (1878-1903). In the domain of science, Sir James Jeans attributes the present trend toward spiritualism to the liquidation of materialistic *mechanism* by twentieth-century physics.

With Jeans' contention that nineteenth-century science was predominantly mechanistic and that such mechanism left no room for free will or any other spiritual activity, I fully agree. How-

ever, I must protest against the interchangeable use which he makes of the terms, *mechanism* and *determinism* in his book, "The Mysterious Universe" (New York, 1933). The terms are not synonymous.

Mechanism (which owes its origin to René Descartes) is the theory that factorizes all natural phenomena into the mechanics of particles moved exclusively by pressure and impact. *Determinism* (a term introduced into science by the French physiologist, Claude Bernard) signifies the law that certain material antecedents, discoverable by experience, are the *necessary* condition of the appearance of any natural phenomenon, in the sense that if said antecedents are wholly or partially absent the phenomenon will not appear. Stated in this *hypothetical* form, what Claude Bernard calls "the determinism of the facts" is borne out by experience and is essential to natural science.

Materialists, it is true, reverse the foregoing formula into *absolute* determinism, alleging that the presence of the antecedents infallibly entails the appearance of the phenomenon; they make the antecedents not only the necessary, but also the *sufficient*, condition of the realization of the consequent, in such wise that, given the antecedents, the appearance of the consequent becomes inevitable. So stated, it is logically inconsequential and unwarranted by the facts. Not in isolation but only in combination do many antecedents imply a single result; taken separately, none of them imply it. Unless they are tied together as components of a unitary causal system, each of the antecedents or partial factors will act independently—regardless of its fellows, and the sum of the antecedents will not entail a unitary consequent. In other words, it is only *on the supposition* of a common end or goal, to which all of them converge, that the plurality of antecedents implies a unity of effect. That supposition, however, is irreversible. Given the final effect, we can deduce from it the antecedents (*i.e.*, the conditions of realization it presupposes), but not *vice versa*. From a disorganized multiplicity of conditioning factors we can never deduce a unity of result.

Evidently it is the *absolute* form of determinism that Sir James Jeans has in mind when he identifies determinism with mechanism and foresees the eventual "abolition of determinism and the law of causation from physics." (*The Mysterious Universe*, p. 37.)

But while Jeans is perfectly right in denying a mechanistic determination of effects in their antecedents, the finalistic determination of events in their material antecedents and efficient factors is undeniable. We see in nature certain effects produced either always or often—rubber-plants uniformly produce latex, tigers uniformly reproduce tigers, etc. We see these regularly produced results form an order. We conclude: (1) that their antecedents and efficient factors are determined to these results; (2) that they are bound together as it were in sheaves, constituting causal systems or agencies.

That there is such a finalization or determinism of natural agencies to their specific effects—that natural agencies operate uniformly and that their uniform modes of action may be formulated in physical laws, which once discovered will never vary but enable us to predict such regularly produced effects—this is what determinism really means, and it is the very backbone of scientific research.

If *any* thing could produce *any* thing, if causes were not limited to determinate effects, there would be no such thing as regularity in nature. Not only, then, are effects *determined by* their causes, but causes are *determined to* their effects. Hence, besides *mechanical* necessitation, violently imposed by impact from behind, we must admit *physical* necessitation (determinism) rooted in a spontaneous verging toward a predestined goal. In other words, all complex agencies of nature are evidently finalized by a tendential determinism, in virtue of which they achieve generally, if not always, their *typical* effects.

PURE MECHANISM IS INDETERMINISM

With mass and motion—the principles of explanation to which the mechanist confines himself by deliberate choice—it is impossible to organize a manifold of factors into a coherent causal system. The mechanist derives his notion of causality from the billiard table; for, following in Hume's footsteps, he pictures a cause as the movement of a cue-ball and an effect as the movement of an object-ball. A causal series he envisages as a row of blocks sent tumbling by an initial flip. "I speak and you hear," is an example of a *causal sequence*, in contrast to the purely *temporal sequence* exemplified in the instance: "The sun rises after the rooster crows." Yet the mechanist has no test for dis-

tinguishing between them—*regularity* will not do; for the sequence of day and night is regular without day being thereby the cause of night or *vice versa*.

He professes to reduce all phenomena to complications of the motions of those innumerable particles into which he dissects and sub-dissects the large chunks of matter. Each whole of nature he disrupts into a multitude of infinitesimal parts, and then he has no available mechanical means of putting Humpty-Dumpty together again. He "explains" visible masses and molar movements by resolving these into invisible masses and small-scale movements *ad infinitum*—always restating the interior in terms of the surface. "As a wall is made of bricks, so a brick in turn is composed of smaller bricks, until we finally reach bricks so small that it is no longer worth our while to trouble ourselves about their nature" (Paulsen).

The mechanist cannot go on with this pulverizing forever; he must stop somewhere and, when he arbitrarily does, he has left on his hands an anarchy of independent neutrons, protons, electrons, etc., that of themselves have no more reason to be in one combination than another. Hence mechanism is at bottom a philosophy of downright *indeterminism*, that is, of *pure chance*, in which nature's dice are perfectly indifferent—as likely to turn up one face as another. Determinism, however, loads the dice of nature and thus ensures in every throw a certain uniformity of results.

And so, if mechanism is actually on its way out, it is no occasion for tears. On the contrary, its demise will spell real progress; for mechanism, after all, was a throwback from Aristotle to Democritus. Should modern physics, therefore, succeed in abolishing nineteenth-century mechanism, it will have deserved well of both science and religion.

Nature is no mad dance of disconnected notes; it is not a Humian chaos into which a Kantian mind thinks a mental order of its own that is not really there. Rather it is an orderly network of inner relations, a vast system of realities linked together and interacting according to constant modes, which it is the scientist's task to measure, to formulate in laws and to interpret with theories of cause.

We have seen that this indubitable determinism of the material world is not absolute but hypothetical. It is no strait-jacket—

no iron mask immobilizing the features of nature. On the contrary, the determinism of nature obtains within limits that leave room for a certain amount of indetermination. No form is permanently anchored in matter. The latter is a Proteus—always able to escape from its present determination and to underline another. The human will, too, though it commonly takes the line of least resistance, can, on occasion, choose the line of greatest resistance, can act against the grain—rising to heights of real heroism; human courage has no freezing-point. But the active indeterminism of free will and the passive indeterminism of matter provide nothing more than particular exceptions to the general determinism of material nature as a whole. Without such a predominant determinism, uniformity would cease to be the primary law of nature. Without a law of the uniformity of nature, all induction would be invalid. Without induction, natural science would be impossible. Thus science stands or falls with determinism. The same is true of religion. For without determinism there would be no order of nature and, if there were no order of nature, it would no longer be true that “the heavens declare the glory of God.” Hence, in holding high the banner of determinism, Science will defend, not only herself, but also Religion.

NINETEENTH-CENTURY MECHANISM

Speaking of the ascendancy that mechanistic philosophy enjoyed throughout the last century, Sir James Jeans remarks: “It was then that Helmholtz declared that ‘the final aim of all natural science is to resolve itself into mechanics,’ and Lord Kelvin confessed that he could understand nothing of which he could not make a mechanical model. . . . It was the age of the engineer scientist, whose primary ambition was to make mechanical models of the whole of nature.” (*Op. cit.*, p. 19.)

Jeans might have illustrated his point by citing any number of other instances. A classic one is the following definition of science by the German physiologist, Emil Du Bois-Reymond (1818-1896): “Es gibt für uns kein anderes Erkennen als das mechanische, . . . Nur mechanisch begreifen ist Wissenschaft—There is for us no knowledge other than the mechanical. . . . Only mechanical comprehension is science.”

Even the biological sciences were forced into the strait-jacket

of mechanism. Charles Darwin mechanized both biology and psychology with his famous selection-principle. On the analogy of the intelligent selection exercised by animal-breeders and horticulturists, he made the assumption of an unintelligent or blind selection made by the unconscious mechanical factors of the environment, going so far as to ascribe to these blind factors of nature even nicer powers of discrimination than those possessed by human experts in artificial selection. "I have called this principle," said Darwin, "by which each slight variation, if useful, is preserved, by the term natural selection, in order to mark its relation to man's power of selection." (*Origin of Species*, 6th ed., ch. III, p. 58.) This is *anthromorphism* with a vengeance! To have retained even the ghost of an analogy between *artificial* and *natural* selection, Darwin, before likening the latter to the former, ought first to have expurgated artificial selection of the element of *intelligent control* lurking in it and vitiating its parallelism with the unintelligent havoc wrought by the blind factors at work in so-called natural selection.

The atheistic Karl Marx, of course, hailed Darwin's Selection theory with joy, because, as he said, "not only is the deathblow dealt here for the first time to 'teleology' in the natural sciences but their rational meaning is explained." (*Letter to Lasalle* of Jan. 16, 1881.) In the same sense, Emil Du Bois-Reymond paid Darwin this eloquent tribute:

"Here is the knot, here the great difficulty that tortures the intellect which would understand the world. Whoever does not place all activity wholesale under the sway of Epicurean chance, whoever gives even his little finger to teleology, will inevitably arrive at Paley's discarded 'Natural Theology,' and so much the more necessarily the more clearly he thinks and the more independent his judgment. . . . The possibility ever so distant of banishing from nature its seeming purpose, and of putting blind necessity everywhere in place of final causes, appears, therefore, as one of the greatest advances in the world of thought, from which a new era will be dated in the treatment of these problems. To have somewhat eased the torture of the intellect which ponders over the world-problem will, as long as philosophical naturalists exist, be Charles Darwin's greatest title to glory." (*Darwin versus Galvani*, "Reden," Vol. I, p. 211.)

With the passing of the nineteenth century this crudely sensistic world-view, which mistook physical dissection for mental analysis, which confounded the thinkable with the imaginable

and demanded that all explanations be made in terms of the picturable, had begun to break down under the pressure of new facts. And Jeans, if somewhat inaccurate in his use of terms, is nevertheless right in his contention that its passing has cleared the intellectual atmosphere for a recognition of human spirituality and religion. How incompatible mechanism was, I will not say with religion, but even with anything deserving the name of culture, must be evident to all. We can readily understand, therefore, that in the Victorian age it was considered smart to be an agnostic; that the man who found life meaningless was judged to be intelligent while the man who found a meaning in human existence forfeited his right to be thought a "thinking man."

This was especially true in regard to the Catholic believer. Two centuries had not sufficed to lay the ghost of Galileo. Obviously, no Catholic was free to follow research whithersoever it might lead. Was not his mind the bond-slave of ecclesiastical authority? How, then, could a Catholic be a scientist and, conversely, how could a scientist be a Catholic? This problem was proposed to Louis Pasteur himself, and the great Frenchman made it the occasion of his celebrated profession of faith, which I translate below as it appears in Victor Van Tricht's report for the year 1895 (the year of Pasteur's death) entitled "*L'année scientifique et religieuse*," read before the Scientific Society of Brussels during its April session of 1896:

"Dear Master," said a student—who had been admitted to intimacy with him—one day, "how can you who have reflected so much and studied so much, how can you continue to believe?" Pasteur replied: "It is on account of having reflected and studied much that I have the faith of a Breton. If I had reflected and studied more, I would have attained to the faith of a Bretonness." (*Revue des questions scientifiques*, deuxième série, tome IX, livraison d'avril 1896, p. 387, tome xxix de la collection, Louvain.)

"Conflict of faith and science!" is Van Tricht's comment. "Let them explain Pasteur. In what way did Pasteur's Christian faith obstruct his research? When was he ever obliged to force the assent of his intellect?"

CATHOLICS AUTHORITARIANS IN FAITH BUT NOT IN SCIENCE

But the bare need of making protestations of this kind gives evidence of how strong the impression is with non-Catholic men

of science that the Catholic Church is hostile to the independence of natural science and aims at substituting authority for research. Nothing could be farther from the truth. The fact is that the Catholic Church positively insists upon the autonomy of all the sciences both natural and philosophical. Nor is her reason for so doing far to seek.

To begin with, the Church could never expect intelligent human beings to receive her revealed doctrines unless she were in position to demonstrate the foundations of religion in general and the credibleness of Christian revelation in particular. But to serve their purpose as reason's *preambles to faith* and as rational *arguments of credibility*, such demonstrations must rest on a basis of *natural reason alone* and must not under any circumstances *presuppose faith*. Otherwise the whole procedure becomes a *vicious circle*—assuming precisely what it professes to prove. Now, from the very nature of things, the Church must use the conclusions of science and philosophy as the premisses of such demonstrations and their whole value for this scope lies in their having been established upon *exclusively natural and scientific grounds*. If the sciences were not bound to verify their own conclusions by independent inquiry and research, the Church could not employ these as premisses to establish the fundamentals of religion and the grounds of credibility. Hence it is absolutely vital to the Church that philosophy and the sciences should stand on their own legs and not on those of religion. It was because it denied that "in these matters reason precedes faith and must lead us to it," that Gregory XVI condemned Bautain's *fideism* (on Nov. 18, 1835). He had already condemned the earlier authoritarian error of *traditionalism*, in his encyclical *Mirari vos arbitramur* of Aug. 15, 1832.

Speaking of the latter (*i.e.*, traditionalism), Cardinal Mercier points out that "when in the first half of the last century De Bonald and De Lamennais sought to oblige human reason to receive its first principles and primary motives of certitude from revealed teaching, Gregory XVI, far from accepting this dutiful subjection, publicly reprovved and condemned the mistaken loyalty of its authors. . . . In short, philosophy and the sciences are autonomous in this sense that in their case the supreme motive of certitude is the intrinsic evidence of the object they study, whereas in matters of faith the ultimate motive is the authority

of God, the author of supernatural revelation." (*Scholastic Philosophy*, Eng. version, vol. I, pp. 22, 23.)

Such is the legitimate independence which the Church herself vindicates for natural science. Naturally, this freedom of science is not an irresponsible one, not a license to misrepresent or to make science a pretext for antireligious propaganda. Only the sincere inquirer who is cautious and conscientious deserves to enjoy the high prerogative of freedom. The man who does not scruple to present theories as facts or hasty generalizations as tested conclusions, is unworthy to be called a scientist. The general public has no means of checking the statements of a specialist and that is why it should be a point of honor with the latter never intentionally to mislead those who, from the nature of things, are obliged to trust him.

OBSCURANTISM SHOWS A WEAKNESS OF FAITH

For the rest, the God who reveals Himself in nature is one with the God who discloses Himself in supernatural revelation. Hence it is impossible that He should contradict Himself. If there seems to be a clash, it is because either the theologian or the scientist has blundered—if then "the vain appearance of such contradiction should arise, this is either because the dogmas of faith have not been understood and expounded according to the mind of the Church or because arbitrary opinion has been mistaken for a judgment founded on reason." (Vatican Council, *Const. de Fide Catholic*, cap. 4.)

From this it follows that the Church has nothing to lose but much to gain from whatever the natural scientist can discover by observation, induction, hypothesis and experimentation. "Never can there be a real conflict between faith and reason," declares the Vatican Council. (*Ibidem*). Consequently, an obscurantism which refuses to face the facts is not a mark of orthodoxy but a sign of weak faith. "What will you say," wrote Galileo, "of the foremost teachers of the university of Padua who one and all declined my offer to show them the planets, the moon and my telescope?" (*Letter to Kepler*.) We all know the sad consequences of that refusal—they have lasted for centuries. Scientists are forgiven for their mistakes, but theologians never.

However, we must do some justice to the latter—the professors of Padua were not necessarily theologians. The Ptolemaic

astronomers of that day must also come in for their share of the blame. There are no worse reactionaries than adepts in a science that has become obsolete. "You can't teach an old dog new tricks," the proverb warns us. Whenever a new system comes into vogue, it must expect to encounter opposition from the diehards of the system it supersedes. This is understandable. The latter have spent years in acquiring the erudition which, if the new ideas prevail, is doomed to become worthless over night. Are we to feel no sympathy whatever for the medieval astronomers who found themselves turned suddenly from experts into ignoramuses by Copernicus' victory over Ptolemy?

A somewhat fanciful illustration from our own day will enable us to appreciate their feelings. Geologists still classify the tertiary and quaternary rocks according to a revised form of Lyell's original table of the percentages of "extinct" and "extant" species of fossilized plants and animals found in these formations. Now suppose, as has already happened (cf. Heilprin's *Geol. and Geogr. Distribution of Animals*, pp. 203, 204), that deep-sea dredging should bring to light more and more instances of such so-called "extinct" species still living in our modern seas; or suppose that more cases like the Laramie formation (in which tertiary plants are found mingled with mesozoic dinosaurs—cf. Nicholson & Lydeker's *A Manual of Palaeontology*, p. 46) were to turn up, would our veteran palaeontologists take kindly to the suggested scrapping of their present system of classification? They might, but nobody would be surprised if they displayed, shall we say, a certain lack of enthusiasm.

That is all very well, it will be said, but what about Galileo's judges? They were theologians, not astronomers. This is perfectly true and I have no wish to whitewash the Catholic fundamentalists of the XVII century, who by their very fundamentalism departed from the whole tradition of Catholic theology. For Catholic tradition counseled a non-committal attitude on the subject of Ptolemaic astronomy. That, at least, had been the attitude of St. Thomas Aquinas (1225-1274). St. Thomas knew that the system of concentric spheres worked out by Aristotle (384-322 B.C.) had been superseded in the course of time by the system of eccentric spheres elaborated by Claudius Ptolemy (fl A.D. 139-161). This made him skeptical on the whole subject; he refused to concede anything more than a provisional

value to such systems. In his commentary on Aristotle's *De Caelo* he says: "But the hypotheses which astronomers have devised, are not necessarily true . . . for it may be that stellar appearances are saved in another manner (i.e., are explicable in some other way) not yet understood by men." (*In lib. II de caelo.*) Literally: "the appearance about the stars is saved—*apparentia circa stellas salvatur*," which is the consecrated Platonic expression used by Plato himself when he proposed to the Academy the first scientific problem in history, that of finding the simplest hypothesis which would rationalize into regularity the irregularities of the "tramp-stars" (planets) of the solar system, without sacrificing the appearances, namely, the facts of experience. For *experience* is our sense-acquaintance with things *as they appear*, whereas *science* is a rational knowledge of things *as they are*.

THE TRAVESTY OF FUNDAMENTALISM

Evidently the XIII century theologian did not feel bound to uphold the Ptolemaic theory despite its general acceptance in his day. Why, then, did the theologians of the XVII century take a less enlightened attitude? Why did they align themselves with the opponents of Copernicanism? Above all, why did Catholic thought, which from the XIII to the XVI century had never found it necessary to consult the Scriptures on other than religious matters, suddenly discover in the XVII century that Holy Writ had a bearing on the profane, no less than the sacred, sciences? With rare insight, Henry Fairfield Osborn laid his finger on the clue to the riddle when he wrote:

"Moreover, the literalism of Cromwell and of Puritanism extended into the naturalistic field of thought now comprised within our great sciences of Geology, Palaeontology, and Biology. Spontaneous thought and observation in all these branches were fairly stifled with Biblical literalism. The Psalmist's broad sweeping aspect of Nature in all its grandeur, the immensity of geologic time, the wisdom of the stars and the parables taught in all forms of animal and plant life were forgotten in textual adherence to the first chapter of Genesis." (*Evolution and Religion*, 1926, p. 8.)

But Protestant literalism or fundamentalism is older than Cromwell (1599-1658) and the Puritans. It dates back to the

first Reformers. Luther (1483-1546) and Calvin (1509-1564) after him, regarded the Bible as a plain man's handbook, incapable of being misunderstood, absolutely foolproof, containing everything a Christian had need to know. To both of these Reformers Biblical inspiration meant that the human writers of Holy Writ had been mere stenographers taking down every word verbatim from the mouth of God. In his *Reply to Texts Quoted in Defense of the Doctrines of Men*, Martin Luther comes to the following conclusion:

"Hence . . . we allow even young children to judge here whether we are to give up the Scriptures, in which the one word of God is taught from the beginning of the world, or the doctrines of men which were newly devised and change daily? And we hope that every one will agree that the doctrines of men must be forsaken and the Scriptures retained. . . .

"Therefore we request the papists that they first reconcile their doctrines with the Scriptures. . . . And the Scriptures, although they also were written by men, are not of men nor from men, but from God. Now since the Scriptures and the doctrines of men are contrary the one to the other, one must lie and the other be true. Let us see to which of the two they themselves will ascribe the lie. Let this suffice." (*Works of Martin Luther*, 1915, vol. II, pp. 454-455.)

This view of Scripture commits the orthodox evangelical to a consistent policy of literal interpretation, with all the crudities that such literalism involves. Moreover, he is not at liberty to admit any human imperfections of style or knowledge in the Sacred Text; for God Himself has dictated every syllable. Were it otherwise, the Bible would not be the word of God but only the word of men. In the eyes of these early fundamentalists, the papist who admitted human imperfections in the Scripture was a blasphemer. It was even more blasphemous for Catholics to say with St. Augustine (A.D. 354-430): "I would not, however, believe the Gospel were it not that the authority of the Catholic Church impelled me to do so." (*Contra epistolam Manichaei* 5, 6.) As for the reasonable Catholic attitude, which allows a certain leeway for figurative interpretation, that, too, was for the Evangelical just another evidence of papist disregard for the sacrosanctness of the Inspired Text.

And so it came to pass that, while Paul III (1534-1549) corre-

sponded with the Catholic priest, Nikolaus Koppernigk (Nicholas Copernicus, b. 1473 d. 1543) and accepted the latter's epoch-making treatise on the heliocentric revolution of the planets, dedicated by its author to this Pope and transmitted by Cardinal Schoendorf in 1536, the same being an advance copy of the work entitled in its final form "*De revolutionibus orbium caelestium libri VI* (Nürnberg, 1543 with preface by Osiander)"—both Luther and Melanchthon attacked the Copernican theory as plainly opposed to the Scriptures. The teaching of it was prohibited at the Protestant University of Tübingen when Johannes Kepler (1571-1630) went there as a student in 1589, and the young Kepler had to be secretly instructed in it by Maestlin. Taking issue with Andreas Osiander's (1498-1552) defense of Copernicanism as a *hypothesis*, the Protestant theologians of the University of Tübingen in 1595 solemnly denounced heliocentrism as utterly incompatible with the Scriptures.

The example of the Lutherans was unfortunately contagious. From Protestant Germany fundamentalist opposition to the heliocentric system spread to Catholic Italy, Catholic theologians anxious to prove that they yielded nothing to the Protestants in their zeal for the Scriptures began to belabor Galileo with *Ecclesiastes*, I, 4: "The earth standeth forever." To *stand* must mean to be *stationary*; it could not possibly mean to be *permanent*. Galileo (1564-1642) had laid himself open to this attack by playing the fundamentalist himself—by meddling with Biblical texts instead of sticking to strictly scientific arguments. That was bound to arouse the suspicion of Church authorities at a time when Luther's teaching had made private interpretation of the Scriptures an extremely vexed issue.

Everyone knows that the ensuing condemnation of Galileo and Copernicanism by the Congregation of the Index (in 1616) and of the Inquisition (in 1633) represented purely *disciplinary* decrees and not *dogmatic* definitions of a General Council nor *ex cathedra* decisions of a Pope. Galileo was never harshly treated, and the very Congregation of the Index that had condemned Galileo in 1616, in 1620 permitted the heliocentric system to be taught as a *hypothesis*; after 1757 even this restriction was removed. Nevertheless, it is regrettable that the Catholic theologians at Rome allowed the wave of Lutheran fundamentalism

to sweep them off their feet. Their action estranged young Science from the Church—a great pity, seeing that Science was the Church's own child, the legitimate offspring of Christian culture, whereas Philosophy had been mothered by the pagan culture of Greece. It also put a dangerous weapon in the hands of religion's foes. Says Père Lagrange:

"In the eyes of the antireligious press it is the death-warrant of the infallibility of the Church and of the Pope. The Church decided that the earth is stationary, and yet it moves. That is the whole question in a nutshell. Thus stated it carries no weight with educated men who are in good faith. It is well known that the supreme authority of the Church never intervened with a formal and irrefutable sentence. But it is the classical example of the generally-accepted opinion theologians have pretended to make binding on the faithful . . . (an) example permitted by God to teach theologians an impressive lesson of moderation. One cannot imagine without a pang the awful position of scientists made to choose between what they look upon as a scientific conclusion, and a decision, not final, but yet official." (*Historical Criticism and the Old Testament*, p. 137.)

Of course, the Church's infallibility was not involved here at all; her infallibility has to do exclusively with matters pertaining to religious faith and morals—she lays no claim to infallibility in matters purely scientific.

Is it necessary to point the moral? Who does not see that even if there be question of an erroneous scientific hypothesis, it is a tactical blunder to oppose it with Scriptural quotations? False science should be met with true science and not with citations from Holy Writ. There will always be infidels who abuse science to attack religion, but as St. Thomas Aquinas remarks, "it is futile to cite authority against those who do not accept the authority." In such a case, the presentation of one scientifically-established fact will be far more effective than a whole concordance of Biblical texts.

More than a decade has passed since the last rout suffered by the hosts of Fundamentalism at the hands of "Modern Science." With Bryan as their leader and the King James version as their ark of the covenant, they marched to Nashville to do battle with the philistines of Science. Technically they may have won the Scopes trial, but they certainly lost the *argument*. Backed by a lustily-applauding press, the scientists captured their Bible and

overwhelmed its quoters with opprobrium—"So the Philistines fought . . . and Israel was overthrown . . . and the ark of God was taken." (*Kings*, IV (II), 10, 11.) Biblical inspiration, apparently, is not a very effective weapon against infidel science! The latter must be met with the only thing it respects—cold facts, and not by urging an authority it does not recognize. Speaking in the capacity of a scientist, Professor Conklin has expressed—a little too complacently, I fear, his impression of the Scopes trial: "It would be amusing," he wrote, "if it were not pathetic, to see these 'defenders of the faith' beating their gongs and firing their giant crackers against the ramparts of science." (*Evolution and the Bible*, p. 24.) True enough, but are Science's own skirts clean? Is a fundamentalist like Bryan any cruder than a scientific mechanist like J. S. Huxley, who wants to apply the parallelogram of forces to the workings of the human mind (*Essays of a Biologist*, p. 264)?

On the other hand, neither Conklin nor Osborn was at heart irreligious; they simply resented, and with good reason, the irrelevant injection of Biblical arguments into a purely scientific question. On this point I heartily agree with both. As a Catholic theologian, I deplore such procedure, regardless of whether the offender is a theologian or a scientist, a concordist or a fundamentalist, a Protestant or a Catholic. When *The London Times* (Lit. Sup., Jan. 14, 1932, p. 31) reviewing Rev. E. C. Messenger's book ("Evolution and Theology") remarked: "Dr. Messenger's frankness and fairness awaken sympathy in the difficulties which naturally arise where the text of the Vulgate and certain observations of the Fathers have to be treated as authorities to be considered in modern discussions," I took occasion of this comment to write: "Dragging the Scriptures and the Fathers into the discussion of evolution creates the false impression that Catholics are bound in conscience to adopt this mode of procedure; it is apt to attract unwelcome derision or sympathy, as the case may be, from persons who imagine that the Catholic Church puts a quarantine on brains. . . . Once more, I repeat, let us refrain from injecting the Bible and Fathers into a purely scientific discussion, and thus make it clear to all that, in the field of natural science, Catholics are objectivists and not authoritarians." (*The Science Counselor*, March 1935, pp. 25, 26.)

THE BIBLE CONTAINS NO SCIENTIFIC TEACHING

Equally deplorable, therefore, with Fundamentalism is the reverse error of Concordism, which employs natural science as a key to the interpretation of the Scriptures. If it is a mistake to intrude Scripture upon the territory of natural science, it is no less a mistake to distort the sacred text by reading into it the viewpoint of modern science, even though one's purpose be the laudable one of reconciling faith and science. This is where Galileo made his mistake, which was also the mistake of those over-obliging "Concordists" of the nineteenth century who were perpetually readjusting the Bible to suit every new vagary favored for the moment in scientific circles. These accommodating yes-men succeeded only in making the Bible ridiculous with their incredible interpretations. Concordism was at bottom simply Fundamentalism grown friendly, nay obsequious, to Science. Leo XIII (1878-1903), in recapitulating the attitude of Catholic tradition, put an end to all this foolishness by pointing out the simple fact that the Bible contains no scientific teaching. "The writers of Holy Writ," said the Pope, "or to speak more precisely, 'the Holy Ghost who spoke by them, did not intend to teach men these things (to wit, the intimate nature of the things which constitute the visible universe), things in no way profitable to salvation'; hence they did not seek to explore the secrets of nature, but rather described and dealt with things in more or less figurative language, or in terms which were in common use at the time, and which in many cases are in daily use to this day, even by the most eminent men of science. Ordinary speech primarily and properly describes what comes under the senses; and somewhat in the same way the sacred writers—as the Angelic Doctor also reminds us—'went by what sensibly appeared' or put down what God speaking to men signified in the way men could understand and were accustomed to." (Encycl., *Providentissimus Deus*, 28.)

"The alternative," says Lagrange, "was to sow trouble in men's minds, by obliging His prophets stubbornly to maintain before all men that the stars were bigger than the moon, that the earth which appeared at rest was turning at a vertiginous speed." (*Op. cit.*, p. 144.) Even scientific men today do not

ordinarily formulate the phenomena of sunrise and sunset in Copernican terms, and for the sacred writers to have done so would have been to discredit even their religious message, there being no telescopes then to verify such extraordinary statements.

In saying, however, with St. Thomas, that the sacred writers "went by what sensibly appeared," the Pope has told us not to look for *science* in the Bible. Science, as we have seen, is a knowledge of things *as they are*, in contrast to experience, which is acquaintance with things *as they appear*. However, as Plato insists, while searching for the *real* nature of things, science must never depart one hair's breadth from the facts of experience—it must "*save the phenomena*" (appearances); it must hit upon such a solution as will fit in with experience. A stick held in water *appears* bent, but is straight. Science explains this by the law of *refraction*, which says that while there is no distortion of the stick as such, there is a *real* distortion of the light-rays reflected from it, thus *saving* the truth of the *appearances*. Science of this sort, the Bible does not contain and it is an anachronism to look for it there.

Summing up, therefore, the aim of the Sacred Scriptures is to teach religion and morals, not natural science. To have supernaturally illumined the human writers of Holy Writ on the subjects of astronomy and geology would not have served this aim and would have needlessly befuddled the simple folk to whom the Scriptures were originally addressed. To make the scriptural message intelligible to men, God used these writers not as mere automatons but as fully human instruments with all their imperfect acquaintance with nature and all their personal peculiarities of style. The imperfections of their human knowledge, however, are no more referable to God than the flaws in handwriting due to a defective pen are referable to the hand of the penman who wields the instrument. The great mistake of the Fundamentalists was to have envisaged scriptural inspiration as verbal dictation. By so doing they reduced the sacred writers to the status of mere automatons and thus made God Himself directly responsible, not for the religious teaching alone, but for everything else in the Bible, including certain primitive ideas on the subject of cosmography. Such things God did not teach nor does He wish them to be taught as coming from Him.

SUMMARY

We have seen that the longstanding quarrel between religion and science was not due to a clash of basic principles, but rather to misunderstandings engendered by the caricaturish misrepresentation of science by mechanism and the equally caricaturish misrepresentation of religion by fundamentalism. In demolishing nineteenth-century mechanism twentieth-century physics is apparently on the point of removing the first of these two sources of misunderstanding. Fundamentalism, while Protestant in origin, has had its repercussions within the Catholic Church—it influenced Galileo's judges and sowed the seeds of such authoritarian errors as Traditionalism and Fideism. This second source of misunderstanding has been already removed by the Church's condemnation of authoritarianism in science and by her official verdict that the Scriptures contain no scientific teaching. As a result the rift between science and religion is closing and the prospect of friendly relations for the future is very bright.

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EARLY RENAISSANCE EDUCATIONAL TREATISES

The age of the Renaissance in Italy was prolific in treatises on education. The treatises of Pier Parlo Vergerio, of Leonardo Bruni d'Arezzo, of Blessed Cardinal Giovanni Dominici, of Pius II, of Maffeo Vegio and of Battista Guarino are the most important that remain to us, while those of Gianozzo Manetti, Nicholas Perotti and Secco Polentone have since been lost. Francesco Barbaro's tract on Marriage, *De Re Uxoriam*, and the books of Matteo Palmieri and Leon Battista Alberti, though not wholly concerned with education, have each an important section on education.

The first and most widely read of all these productions of the Revival of Letters was the admirable treatise of Pier Parlo Vergerio (1370-1445), *De Ingeniis Moribus et Studiis Liberalibus* (On Noble Character and Liberal Studies). Vergerio is a Catholic humanist of strong religious principle. He was a statesman and a canonist and, though probably in minor orders, he was not a priest. His educational aims are the recognized Catholic aims and, combining as he does the high standard of learning with the inculcation of sound Christian principles, he set the ideal which Renaissance educators were to strive after. This treatise was written about 1392 and was addressed to Ubertino, son of Francesco Carrara, lord of Padua. It outlines a complete training for the young prince the aim of which is character formation.

In setting forth the value of a liberal education Vergerio stresses the importance of moral discipline. "We call those studies liberal," he says, "which are worthy of a free man; those studies by which we attain and practice virtue and wisdom; that education liberal which calls forth, trains and develops those highest gifts of body and mind which ennoble men, and which are rightly judged to rank next in dignity to virtue only. For to the vulgar temper, gain and pleasure are the one aim of existence; to a lofty nature, moral worth and fame." To the mind of Vergerio a virtuous character is the only basis on which to build the new learning. Equally significant are his views on the training of children in reverence to parents and elders and in courtesy to all and his insistence on the necessity of studying the natural bent and capacity of each pupil.

Vergerio was a professor in the University of Padua which was a center of humanistic learning at the beginning of the Renaissance. As a lecturer in this University his writing and teaching were to leave their mark on one of the world's great teachers, the distinguished Catholic layman and humanistic schoolmaster, Vittorino de Feltre, whose unique court school at Martua is of paramount interest in the consideration of its methods and aims. Vittorino's system of education is fundamentally the practical application of the humanistic theory as expressed in the educational treatise of Vergerio.

The excellent treatise of Leonardo Bruni (1369-1444), often called Aretino from his birthplace, Arezzo, is thoroughly Catholic. Although he was a friend of the pagan humanist Poggio, he himself was a good Christian scholar. His essay on the study of literature, *De Studiis et Litteris* (On Studies and Letters), is in the form of a letter addressed to Baptista Malatesta, one of the earliest of the learned women of the Renaissance. In the education of the Christian lady, Bruni insists that religion and morals hold first place. He presumes that the Christian lady will be acquainted first with the Christian writers of whom Lactantius, Ambrose, Jerome, Augustine and Cyprian are specially recommended. It is not expected, however, that she will confine her reading to ecclesiastical writers, as morals have been treated by the noblest intellects of Greece and Rome and what they have had to say upon continence, temperance, modesty, justice, courage, greatness of soul commands our respect. Bruni would have her read in particular the classical poets with whom the Fathers of the Church reveal a scholarly acquaintance. In conclusion he desires that while learning be full and varied it must be available. "But to enable us to make effectual use of what we know, we must add to our knowledge the power of expression." In this letter Bruni expresses the best that the Humanists had to say on the study of literature.

Of all the treatises of the early Renaissance, the *Regola del governo di cura familiare* (Rule for the government of the family) of Blessed Cardinal John Dominici (1356-1420), is perhaps the most detailed. This is a valuable pedagogical work which treats in four books of the faculties of the soul, the powers and senses of the body, the uses of earthly goods and the education of children. It was written to instruct the wife of Antonio

Alberti in the government of her family and gives minute details for her guidance. In his instruction the author holds up a lofty standard of conduct and displays good practical common sense. Dominici was conscious of the irreparable harm that the Classic Renaissance was doing to Christian civilization by tending to establish pagan ideals in the minds of the young and in this treatise and likewise in his *Lucula Noctis*, a work on the study of the classical authors, he opposes the pagan tendencies of the new learning. In the treatise on family life he insists that children be brought up as Christians and not as pagans, and denounces a system of training which would have them learn the names of Jupiter, Saturn and Venus rather than those of the Holy Trinity.

Aeneas Sylvius Piccolomini (1405-1464), later Pope Pius II, is the author of the educational treatise *De Liberorum Educatione* (On the Education of Children). This tractate is a letter to Ladislas, the youthful king of Bohemia and Hungary. Piccolomini's ideas on the new learning coincide with much of the thought expressed in the first book of Quintilian. The treatise recommends in particular the study of history, advocating the reading of the chief historians and from their study learn practical wisdom. Pius II expresses the aim of a liberal education in terms of character which is "our one sure possession." "The place and fortune of men change," he states, "it may be suddenly, profoundly; nor may we by taking thought, cunningly hedge ourselves round against all the chances of life." Character is to be obtained by religious training and through the study of philosophy and letters.

The *De Educatione Liberorum* of Maffeo Vegio (1406-1458) is most comprehensive and most Christian in spirit. During his life as an Augustinian, Vegio kept up his interest in the classics and recommended their study. His treatise is in six books, the first three of which treat of the duties of parents and teachers in education; the last three of the duties of the young to God, their fellow-men and themselves. Vegio reflects in his work much of the educational thought of Vergerio, but indicates much more moral and religious instruction. He likewise treats of conduct and manners more fully. In dealing with the respect due to others, he includes the poor and unfortunate. He recommends that even the wealthy boy learn some art or trade so that he

may provide himself with a means of livelihood in case adversity cause him to lose all. Vegio would have children ruled by love and encouraged judiciously by praise. Punishment, he believes, makes "servile characters." He advocates a practical training for girls in household duties, such as housekeeping, spinning and embroidery. For Vegio the supreme end of education is the formation of a sound moral and Christian character.

The *Libro della Famiglia* (A Book on the Family), written by Alberti (1404-1472), consists of four books, of which the first deals with the duties of parents to children and of children to parents. In infancy and early childhood the mother holds first place, but as the children grow older the father is the head. Children are to be brought up in the fear of God and are to be trained in the practices of religion. The home is the great educational force and the character of the home is dependent on the character of the parents. The study of letters rightly imparted should induce interest in noble thoughts and words and deeds. According to Alberti, a useful life consists in the fulfillment of one's duty to family, country and God.

About the same time, Palmieri (1406-1475), who was a close friend of Alberti, produced his work, *Della Vita Civile* (On Civil Life). Palmieri treats of education as regards the ideal Florentine citizen. His ideas on the training of children in the home though in no way new are profoundly Christian. His advice concerning the use of money and his praise of liberality are noteworthy. He favors the building of beautiful churches and the furnishing of costly ornaments for divine worship.

The books of Alberti and Palmieri were written in dialogue form. They are illuminating for the light which they throw on the attributes that were looked for in the Florentine woman. Though it was expected that the women of Florence cultivate culture and learning, they were to possess at the same time the homelier virtues of the good housewife, skilled in the domestic arts of dairying, spinning, weaving and needlework. Their education was to be characterized by a training in the sense of duty and responsibility so that they might become domestic and business-like.

Barbaro (1398-1454), who was a pupil of Guarino da Verona, wrote his work on Marriage when he was seventeen years of age. In the chapter on education, *De Liberiorum Educatione*, Barbaro

reproduces much of the current educational opinion regarding the training of children.

The period draws to a close in Italy with the remarkable treatise of Battista Guarino (1443-1513), *De Ordine Docendi et Studendi* (On the Method of Teaching and Studying). Battista was the son of Guarino da Verona, and he was the only son of Guarino's large family who showed any taste for scholarship. He followed in his father's footsteps and finally occupied his place as professor in the University of Ferrara. The younger Guarino was associated with his father as an expert in textual emendation in his father's school at Ferrara. The plan of education here was much the same as that adopted by Vittorini. Probably at his father's suggestion, Battista wrote this treatise upon the method of teaching and reading the classical authors. The tract represents the educational plan and method pursued by his father.

In these early Renaissance educational treatises one notes ideas common to all of them. The duties of a mother, the choice of a nurse, the selection of a tutor, and the effects of environment on early training are all taken up for discussion and each writer has something to say on each of these important topics. The role of the mother in the child's early formation and direction is emphasized. Noble Roman women are cited who have been famous in history for their responsibility to the position of mother. Vegio, however, who has great admiration for St. Monica, prefers to hold her up as "the model of all educating mothers." The home training is to be a religious training. Children are to be brought up in the love of God, their country and their home. The child will have his prayers by heart, the Our Father, the Hail Mary, the Creed, the Commandments and portions of the Gospels. Respect for parents and elders is to be taught from the earliest years and courtesy to all is to be inculcated. In the child's physical training a certain hardness is to be cultivated. The luxury of soft beds and artificial heat are prohibited, while fresh air, suitable dress, plain diet and moderation in eating and drinking are prescribed.

Not all are agreed at what age the child should enter upon a definite and systematic course of instruction, but all are agreed that actual instruction should be made pleasant and attractive. Lessons are to be alternated with games and bodily exercises

which serve to build up the body physically and strengthen the limbs. Swimming, fencing, gymnastics and military exercises, music and singing are recommended. The choice of the teacher should be made only after much forethought. The teacher stands in a quasi-parental relation to his pupils and they should be united by mutual affection, with veneration on the part of the pupil and deep personal interest on the part of the teacher. The course of study is based on Latin and Greek letters with history and philosophy holding a dominant place, while mathematics, the study of nature and astronomy hold a subordinate position. The curriculum for girls is substantially the same as that proposed for boys. More stress, however, is laid on religious reading and less instruction is advocated in rhetoric. Corporal punishment is condemned. Children are to be ruled not by fear but by love.

The similarity of subject matter in these early Renaissance educational treatises shows a dependence on the same materials out of which these humanists built up their ideal of education. As the whole history of the Renaissance was rooted in antiquity, it was natural that the Italian humanist scholars and educators of the fourteenth and fifteenth centuries should likewise find in the writings of the ancients many of those ideas which they were to carry out educationally. While Cicero's *De Oratore* (On the Orator) and Plutarch's *De Liberis Educandis* (On the Education of Children) proved helpful in shaping Renaissance educational practice, Quintilian's educational treatise, *De Institutione Oratoria* (The Institutes of Oratory), in particular influenced the pedagogy of Renaissance educators during the revival of classical culture. Vergerio's *De Ingeniis Moribus* reproduced many of the educational ideas of Quintilian and gave an impetus to the production of subsequent educational treatises of the early Renaissance.

The *De Institutione Oratoria* of Quintilian treats of more important pedagogic topics than any other ancient educational treatise. It appears that the teachers in the monastic schools of the Middle Ages used many of its suggestions. During the later Middle Ages it was evidently lost from view, when in the fourteenth century the rediscovery of the lost Quintilian was an occasion of great rejoicing among the humanists. A part of this great treatise was known to Petrarch, while the first modern

introduction to the study of Quintilian was produced by Vergerio. A complete copy of Quintilian was discovered in the early part of the fifteenth century by Poggio in the monastery of St. Gall, Switzerland, and was copied by him in fifty-three days. About the same time Cicero's *De Oratore* was found which previously had been known only in a mutilated form, and a little earlier Guarino had rendered into Latin Plutarch's treatise on education.

The educational views of Plutarch are in close agreement with those of Quintilian especially on the early care and training of children, on the choice of a teacher and on the nature of early discipline. This educational essay of Plutarch, regarded by some critics as spurious, yet generally included in his works, is significant in the history of education. It probably is the latest connected treatise on education that has come down to us from ancient times.

The outstanding feature of these early Renaissance treatises on education is the Catholic spirit that pervades them. Their authors were completely Catholic in character and influence. The religion of Christ was for them the central fact of life. They gloried in the golden age of classical culture, but their devotion to the ancient classics was adopted by them to their unchanging Catholic faith. Schooled in the scholastic institutions of medieval learning and with Vergerio as their preceptor, they undertook to draw from the study of ancient literature its cultural elements without detriment to Christian principles and Catholic tradition. These noble scholars combined their classical enthusiasm with Christianity. As Symonds has so well said, "They received their earliest education in the religion of the Middle Ages, their second in the schools of Greece and Rome."

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ARE WE HEADED FOR GOVERNMENTAL CONTROL OF HIGHER EDUCATION? *

The nature of our whole program today, and the motive that has urged us to invite our trustees to this meeting, is one that is not usually associated with academic pursuits. The dangers that threaten the freedom of higher education today need a wider hearing than an audience limited to academic circles. For that reason, I want to bring up before you the bogey that seems to be troubling more and more the uneven tenor of the college president's life. With no pretense to careful research on the history and habits of this disturbing creature, but with the thought of revealing its form a little more clearly, I ask your indulgence and patience for a brief period.

We are all thoroughly familiar with the tendencies of federal and state agencies to effect a greater measure of control in the fields of business and finance. Through the printed word and the spoken word, opinions "pro" and "con" on these trends are kept constantly before us. We, in common with men in all walks of life, have, no doubt, our own opinions, perhaps hopes or fears in these realms.

TREND TO GOVERNMENTAL CONTROL

Is there, in the field of higher education, a parallel to the situation as we observe it in the business and financial world? I believe that there is. During the past few years, there have been increasing evidences of paternal interest in higher education on the part of federal and state governments, that give rise to well-founded fears that we are heading ultimately for governmental control of higher education. I do not wish to convey the slightest implication that there is any present intent of control in the mind of any governmental agency. But I do think that present tendencies are paving the way to make it easy for governmental agencies in the future to assume such control if they are so minded.

Repeated efforts to establish a Federal Department of Edu-

* Presidential Address, Annual Meeting of the Association of College Presidents of Pennsylvania, Penn-Harris Hotel, Harrisburg, Pa., January 28, 1938, by Very Rev. Edward V. Stanford, O.S.A., President of Villanova College, Villanova, Pa.

cation, with an officer in the Cabinet, have failed. This would seem to indicate clearly the temper of our legislators and the general public. Yet, year by year, federal and state agencies are expanding their activities and interest in higher education, and, in devious ways, limiting the freedom and threatening the existence of privately supported institutions.

THREE DANGEROUS TENDENCIES

Let me clarify my contention in a broad, general way by references to present activities under both federal and state authorities. For practical purposes, we can roughly group under three headings these threats to the freedom, or it may be to the existence, of privately supported colleges and universities.

In the first place, there are increasing governmental subsidies to state institutions of higher learning to an extent that will encourage these institutions to duplicate or replace the facilities already afforded by privately supported colleges and universities.

Secondly, there are evidences of federal and state encroachments in the field of the voluntary accrediting agencies.

Finally, there are threats of taxation against privately supported institutions of higher learning.

FEDERAL SUBSIDIES TO HIGHER EDUCATION

What is the danger from governmental subsidies? Let me illustrate by citing recent occurrences, both federal and state.

In November just past, four college presidents were in conference with the National Advisory Committee on Education in Washington, on the subject of federal subsidies to colleges. Let me quote from the letter which I received from one of these presidents after that conference:

"Tactful and repeated questioning on the part of Chairman Floyd Reeves of the National Committee elicited the steady and positive response from all four of us to the effect that we feared federal grants inevitably meant federal control. Reeves finally admitted the implication was justified.

"As a result of the whole conference, our committee of four felt rather keenly that there was a real desire on the part of the Reeves committee to recommend very liberal federal grants for the addition of buildings and other equipment to the state-supported schools, for increase in budgets to make possible better faculty salaries, for liberal contributions toward undergraduate scholarship help and post-graduate fellowship grants, and for

quite sizable contributions to state institutions for research purposes.

"Our committee indicated to the National Committee that if Congress should pass a bill containing these features, the dual system of state education, balanced by a system of high type private colleges and universities, would not long survive. The independent institutions would inevitably find themselves unable to compete with the state group financially supported in a much larger way."

STATE SUBSIDIES TO HIGHER EDUCATION

To provide a single instance of state activity, I can do no better than to refer to what has recently come about in our own Pennsylvania. It is unthinkable that our legislative body here in Harrisburg would knowingly legislate the State Teacher Colleges into positions openly in competition with the privately supported colleges and universities of the state. Yet this situation is being gradually brought about in various ways. An expansion program for the Teachers Colleges, at a cost of ten millions of dollars, would hardly be directly voted by the legislature. Yet the General State Authority with broad, general powers has been established. The sum of ten millions of dollars is now actually being expended for a building program of the State Teachers Colleges. At the same time, it is reported that there is a considerable falling off in enrollment at these colleges, attributable, some think, to the adoption of the recent Teacher Tenure Law. One State Teachers College, which is supposed to have accommodations for eight hundred students, is reported now to have only a little over two hundred students enrolled. Nevertheless, four new buildings are being erected on the campus of that institution. These added facilities, built and maintained at state expense, in the face of a falling enrollment, will be a ready and strong argument for the conversion of some State Teachers Colleges into general colleges, with the understanding, of course, that they will still be maintained and operated by the state.

Within the recent past, the Secretary of our Association, Doctor Tolley, wrote to Augustine S. Janeway, Executive Director of the General State Authority, about rumored appropriations to publicly supported institutions of higher learning. He received this confirmation of his fears. Let me quote:

"Acknowledge receipt of your letter of November 29, and I am writing to state that the building program of the State Teachers

Colleges amounts to approximately \$10,000,000, and the building program at Pennsylvania State College is \$5,000,000.

"This program was made necessary, due to the fact, that for a long number of years, the legislature had made no appropriations to rebuild the worn-out utilities, or, to have made urgently needed repairs to existing buildings, or to relieve the overcrowded condition, or rectify the fire hazards in the present buildings and adequately take care of the present enrollment.

"The Federal Government has made available to the state a grant up to 30 per cent, depending upon the amount of relief labor utilized on the projects and the balance is made up by bonds issued by The General State Authority."

PRIVATE GIFTS TO STATE COLLEGES AND UNIVERSITIES *

Keeping in mind the tendency to grant increasing subsidies to publicly controlled institutions of higher learning, the findings of a recent study on Private Gifts and Grants to Institutions of Higher Education, over the ten-year period from 1925-26 to 1935-36, are doubly significant. In 1925-26, 526 privately controlled institutions reported private gifts for increase of permanent funds to the amount of 70 millions of dollars, while during the same period, 50 publicly controlled institutions reported private gifts for increase of permanent funds to the amount of \$1,700,000. In 1935-36, however, 625 privately controlled institutions reported private gifts of \$33,500,000, for the above-named purpose, while 94 publicly controlled institutions reported a total of \$10,700,000 as private gifts for the same purpose.

Briefly, during the ten-year period between 1925-26 and 1935-36, there was a steady decrease in the private gifts to endowment funds of privately controlled colleges, a decrease of \$36,500,000. The private gifts to the endowment funds of publicly controlled institutions showed a steady increase of \$9,000,000. I submit these figures as additional evidence of the trend to subsidize state-controlled institutions of higher learning. I make no attempt to explain what is responsible for this anomalous situation.

N. Y. A. ASSISTANCE TO COLLEGE STUDENTS

Let me make reference to one further illustration. The emergency assistance to students afforded by the National Youth

* Taken from recent information obtained by the American Council on Education from the Federal Office of Education.

Administration has been impartially administered so as to make no invidious distinctions between publicly and privately controlled colleges and universities. Even under these conditions, there are many who feel that this measure should not be unduly continued because of the danger that it may open the door to federal control. Recently, however, a disturbing rumor has come out of Washington, indicating the probability of the discontinuance of N. Y. A. aid to students in privately supported colleges, while maintaining it for students in publicly supported institutions. This rumor seemed sufficiently well grounded to prompt the Association of American Colleges, meeting last week in Chicago, to issue this unanimous resolution. I quote, in part:

"Be It Resolved, that the Association of American Colleges with a membership of five hundred and twenty-eight colleges and universities, views with grave concern a report that the Officials of the National Youth Administration may next year make a discrimination between publicly and privately controlled colleges in the allocation of aid to college students. . . . When a general reduction looking toward an eventual elimination of subsidies becomes wise, the Association suggests that the reduction should be gradual and alike for all colleges and universities."

WILL GOVERNMENT ATTEMPT TO STANDARDIZE COLLEGES?

I have made mention also of federal and state encroachments in the field of voluntary accrediting agencies. I refer particularly to the stream of questionnaires which come to the desk of every college president from various federal and state educational agencies. An endless amount of detailed information is sought on the plea of trying to be helpful to the colleges.

There are no laws, of which I am aware, making it mandatory on the colleges to supply such information, but every conceivable pressure is brought to bear to secure this information, even to the sending to individual colleges of investigators, from the Office of Education. Although it is true that this information has been put to no other use than the compiling of comparable reports, it does set up in the Office of Education in Washington, and in the State Education Offices at Harrisburg, a wealth of information that will be of great service to both Federal and State Governments if, in future years, the stage is set for federal and state control in the field of higher education.

Perhaps I am unduly apprehensive in this matter, but I can-

not be unmindful that the system of state control of education in Germany made it easy for the Hitler regime to set up an absolute monopoly in education. I think that most people will agree that in the main, our voluntary accrediting or regulatory associations are more in accord with our democratic traditions in education than would be the case if these powers were finally to be taken over by federal and state agencies. Even in our accrediting associations, an arbitrary use of power can be exercised by a minority. But concerted action on the part of the member colleges can largely nullify this evil, since these voluntary associations depend largely upon moral sanctions rather than on legal sanctions. If, however, this regulatory control of education were to come completely under the authority of the state, with its ability to make laws and regulations, carrying legal sanctions for their prescriptions, the opportunity for redress or amelioration of ensuing evils would not be readily obtained. I believe that we should look with concern on the present tendency to draw greater and greater accrediting control into the hands of state or federal agencies.

TAXATION OF COLLEGES

Taxation of privately controlled colleges and universities is another threat to the continued existence and well-being of these institutions. There is no doubt that taxation could readily be used to hamper greatly, and even to rule out of existence, a large number of the independent colleges of this country. That this danger is not a remote one is quite evident from the recent controversy over tax laws in the State of Indiana. Proposals for taxation of the colleges have also been seriously discussed in Connecticut.

President Dennis of Earlham College, Indiana, in a bulletin which he has prepared relative to the taxation of colleges in Indiana, says:

"There is a growing tendency to increase the tax burden of private educational institutions. The Federal Government is not free from this tendency, but by all odds its most acute manifestation in the United States is found in state legislation which seeks to abolish or modify the tax exemptions hitherto enjoyed by private and church-related educational institutions. . . . The threat to the continued existence and prosperity of our colleges involved in this tendency to increase their tax burdens has been repeatedly

pointed out and deplored by the leading educators of the country."

In an address at the Harvard Tercentenary Celebration, Doctor Angell, at that time President of Yale University, in speaking of the immediate seriousness of the attack on the colleges through taxation, said:

"This assault takes two general forms: one, the attempt of local governments to impose real estate and other taxes upon endowed institutions which are exempt by legislative enactments. The second threat to endowed institutions from taxation arises from the relentless impositions on income and on legacies of benevolent individuals, two sources from which the endowed institutions have, in the past, secured a large part of their essential resources. *Men in high authority have been of late quoted as intimating that taxation would shortly be so used as to compel all endowed colleges and universities to come under State or Federal control.*"

THE INDEPENDENT COLLEGE ESSENTIAL TO AMERICAN DEMOCRACY

Briefly, then, I have endeavored to give some reasons that incline me to think that our privately supported colleges are headed for an increased measure of state control in the not too distant future. The concern that I have expressed is predicated on two basic assumptions upon which, I take it, we all agree: Firstly, that our so-called privately supported colleges are, in effect, *public institutions* rendering a *public service* that is of tremendous importance today when a sound philosophy of government is under attack; secondly, that, in a very real sense, the continuance of American principles and democratic processes rests upon the adequate support and the continued strength of our independent colleges. I realize full well that I have presented only a cursory glance at the situation as it has come to my attention. No attempt has been made to broaden my impressions by delving into the literature and statistics which are no doubt available. I hope that I have said enough to give at least a partial answer to the question proposed as the subject of this address. There is every reason for us to be on the alert against the possibilities, no matter how remote they may seem, of a state monopoly in the field of higher education. I believe that it is our duty to see that the governing boards of our institutions, our alumni, friends, and the general public are aroused to a recognition of the danger.

SOME CATHOLIC LAW SCHOOL OBJECTIVES

At the present day, considerable ferment has developed in the Law School world over the question of Law School objectives. There seems to be felt a lurking fear upon the part of legal educators that all is not well with contemporary legal pedagogy. There is a well-founded suspicion that Law Schools are not producing the kind of lawyers that the facilities available and the faculties obtainable should develop. If legal educators as a whole are troubled with the problem, it would seem to be eminently fitting that Catholic legal educators should indulge in some reflection on whether or not Catholic Law Schools are properly fulfilling their duty and obligation to the students who apply to them for a sound legal education.

In a day when so many fundamental legal and governmental principles have been placed on trial and have been threatened with extinction, a splendid opportunity is presented for a school of Catholic Lego-Philosophical thought, i.e., a restatement of Scholastic Philosophy in the light of modern development in the positive law, to supply a criterion and a standard of value to guide those who are making an attempt to delve into the philosophy of the positive law.

It is the purpose of this paper to suggest a program whereby something like a distinctly Catholic Law School may be established. The problem will be discussed under three separate heads: Curriculum, Personnel, and Legal Writing.

CURRICULUM

In spite of the efforts of some of the more noted Law Schools in the United States to turn their classrooms into laboratories and their students into "white mice," there is still a considerable sentiment which holds to the notion that one of the fundamental objectives of a law school is to qualify its graduates to pass satisfactorily the bar examination and to be admitted to the practice of the law. That this is not the only objective, I hasten to admit, but any law school which subordinates this objective to the extent that only 50 per cent or less of its graduates qualify for the practice, is not giving value received to the student who attends that school. Such a school is guilty of gross negligence

in the performance of the duty owed to the student who pursues its course of study. The writer is fully aware of the attitude (an attitude bordering on contempt) with which certain legal educators view bar examiners and the usual type of examination given. It is conceded that a greater coordination is desirable between law schools and bar examiners to the end that a truly distinguished bar may result. This problem is commanding serious thought which may result in a closer cooperation and mutual sympathy. Until that desideratum is attained, however, it seems that law schools should keep squarely before them the duty to qualify their students for the existing ordeal. I say this with a full recognition of the unsavory influence of the unconventional "Bar Review" law school and a thorough indictment of such institutions. With Aristotle, we are perforce brought to the conclusion that for the present—"in medio veritas." In view of the need for keeping the above objective in mind, it is the opinion of this writer that it would be a mistake to attempt to realign the orthodox curriculum which is now employed for the most part in all of the better law schools. The task of reorganizing the standard case materials with a view to giving them a distinctive Catholic philosophical background would be uneconomical and virtually impossible of attainment. Then, too, there is the danger of running afoul of the various standardizing agencies if such a drastic alteration of curriculum structure were attempted. Therefore, let the standard works be retained and the orthodox division of subject matter be employed.

In the presentation of such courses as Contracts, Torts, Domestic Relations, Successions, Criminal Law, Constitutional Law, and a few more, where the personal element and freedom of choice is emphasized, it will be necessary for the professor to be equipped and disposed to inject into his lectures a sound and consistent exposition of the true norm of morality and to emphasize that for the average human relation, the parties act from a sense of moral responsibility and not from a fear of the state militia. For me, it is in dealing with the concept of Sanction that some of the modern writers in the field of the Positive Law make of the Positive Law such an unworthy and brutal thing, and reduce the parties to the low level of cowering knaves, who act only from a sense of fear. Their analysis of the legal order is a familiar and withal a plausible one. One has a right

only in so far as a court will enforce it. It is idle, so the argument goes, to speak of having a right if there is no court (and sheriff, and ultimately an armed militia) which will recognize and enforce it. The argument comes to this: There are no rights except *legal* rights, and thus the persecutions of Cardenas in Mexico are within his rights because they are *legally* sanctioned. The conviction of Louis XVI by the Revolutionary Tribunal was right because it was done with a show of legality. A revolution which fails can never be right. And if the colonists had been defeated in the American Revolution, perforce, their cause would have been wrong, their sufferings treasonous, and their sacrifices null and void *de lege*. But they won! And so, by a parity of reasoning, they are heroes and might is right! It is with such matters in the classroom that the professor, well grounded in his Christian ethics and his faith, can give a distinctly Catholic and withal a *true* flavor to his course and to his school. While the above considerations constitute only one of the numerous errors that have been promulgated by very much of our current legal philosophical literature, the contentions advanced go to the very roots of philosophical inquiry into the nature of positive law and its function in society. If some effort is not put forth by the individual teacher to infuse his lectures and comments with sound philosophical observations, the complete secularization of Catholic law schools will soon be accomplished. Later on, the writer, under the subject of Personnel, will endeavor to suggest a plan to effect a uniform and consistent program of teaching technique with a view to the accomplishment of a more distinctive pedagogical method.

While the writer thinks it is advisable to maintain the usual program of instruction which is now employed with respect to the presentation of a legal education, he is of the opinion that a minimum of five semester hours should be devoted to specific courses in the Philosophy of Law some time after the first year and satisfactory work in these courses made a prerequisite to graduation. These hours should be devoted to a consideration of the various schools which have had some currency in any age of the law and then round off with an apologia for the need of and the adequacy of scholastic principles in any attempt to interpret and understand the function of the Positive Law. Stress should be given to the need of sound philosophical principles

when dealing with the matter of Legislation. The distinction between acts which are *malum in se* and those which are indifferent in their nature should be emphasized. Since it is a recognized fact that a fair preponderance of lawyers constitute our legislative bodies, this inquiry is especially pertinent. Moreover, the manifest utilitarian attitude which broods over our legislative chambers and prompts most of contemporary legislation is an evil which must be reckoned with. Where is there a better opportunity than that presented in a genuine Catholic law school?

A difficult task is that of selection of a person properly equipped to present these courses in the Philosophy of Law. The practice seems to be in those schools which offer such courses, to place them in the hands of a member of the clergy who is associated with the university of which the law school is a part. This selection is usually justified upon the assumed qualifications of a member of the clergy to present a philosophical course and the unavailability of anyone else to meet the requirements. Unless the particular cleric has been trained in the Positive Law, however, it is my opinion that he is not properly equipped to give a satisfactory course in the Philosophy of Law. His intellectual endowments may be of the first order and his pedagogical ability unquestioned, but unless he can sympathetically formulate the problems of the Positive Law *as they appear to the lawyer*, he is in no position to offer sound and convincing arguments in defense of scholastic principles. It will not be enough to quote apt and traditional Latin aphorisms when the student asks the philosophical answer to the question: If a beneficiary under a will murders the testator, should he be permitted to inherit? The student knows that there is a principle of Positive Law that the will of the testator should be given effect to, and his disposition of his estate should be respected and enforced by the administrative officers of the law. The student knows, too, of another principle of the Positive Law which will not permit a person to profit by his own wrong. And so his mind is not satisfied by generalities. More than that, he expects that the full *legal* significance of his question and difficulties will be appreciated. To be able adequately and convincingly to present a live and effective course in the Philosophy of Law demands that the teacher be familiar with the philosophical systems which have had influence in the legal order, he must be conversant

with Scholasticism and its restatement, and he must be conversant with the Positive Law and its technicalities. How many such men are to be found on the faculties of our Catholic law schools? Still, there is a genuine need for such a course, especially in this day when the Catholic law schools are turning out men every year who have been stamped with approval and who are confronted with a world which has little or no sense of values and of the eternal verities. Is it any wonder that these graduates succumb to the ways of expediency and the materialism with which the modern world is rampant?

PERSONNEL

The matter of faculty personnel is of first-rate importance in an endeavor to develop a distinctly Catholic law school. Needless to say, the individual member, if not a communicant, ought at least to be sympathetic with Catholic tradition and Catholic thought. He should be unbiased and open minded and willing to cooperate in the task of creating a Catholic atmosphere within the law school. It is desirable that his educational qualifications include a first degree from a Catholic college or university wherein he will have been introduced to the scholastic system of Philosophy as it is presented in the conventional undergraduate studies. It might be stated at this time that the real reason for the current disrepute of scholasticism in the field of Positive Law is more the result of ignorance of its content and possibilities than of bias and prejudice. Thus it is especially desirable that the law teacher have at least an elementary knowledge of that system of thought. This point will be considered at greater length under the title of Legal Writing.

The faculty of a Catholic law school should be united in a uniform technique of presenting law courses which involve substantial philosophical content. This should be particularly emphasized in introductory lectures, especially to the first-year students. This style of inquiry should be consciously established and maintained throughout the student's law school career. It is not necessary that there be a repeated reference to philosophical implications with a resulting sacrifice of practical instruction, but there should be a definite approach to the whole field of the Positive Law with respect to its source, its function and its end. This unity of procedure can be accomplished by oc-

casional faculty meetings wherein the program could be outlined and then followed up by later meetings wherein pertinent problems could be discussed among the faculty and a definite procedure agreed upon.

It is indisputable that the program herein outlined is one of long-time consummation. It is patent that the development of a distinctly Catholic Law School cannot be accomplished in a year or even two years. The task is a problem from now on. For the reason that any thinking on this matter must project itself into the considerable future, it may be permitted at this time to propose a long-time plan with respect to faculty personnel. It would seem thoroughly desirable to launch a definite program with a view to the grooming of certain students of the Catholic Law School for service on the faculty later, provided that they are equipped and have the aptitude. One phase of the desirable Catholic law school teacher has been mentioned heretofore, i.e., a first degree from a Catholic college or university. During his undergraduate law career, the prospect ought to be urged to arrange for graduate work at some one of the outstanding non-Catholic law schools. This latter point is stressed because whether Catholic law schools like it or not, or realize it or not, there is probably only one in the United States which has a Graduate Law School of outstanding rank. And by outstanding rank, I mean that their graduate degrees represent the high scholarship which the same degree from certain non-Catholic law schools command. The situation calls for a realistic observation of the American scene as it is. The graduate of a non-Catholic and outstanding law school will be acceptable then as an eligible addition to the Catholic law school faculty by all concerned. His degree will meet the objective standards of genuine scholarship and his previous training qualifies him to participate in the program of developing a distinctly Catholic law school. A faculty with such a personnel could accomplish a great deal toward the end that there be developed a truly Catholic law school.

LEGAL WRITING

That there is and has been a dearth of writing and research on legal subjects from a distinctly scholastic point of view was fully recognized at the first meeting of the Standing Committee

on the Philosophy of Law of the American Catholic Philosophical Association.¹ What may not have been recognized at that time (and which was not discussed, or at least incorporated into the minutes of that meeting) is the fact that there is a considerable quantity of contemporary literature on Jurisprudence and the Philosophy of the Positive Law. The consensus of opinion among the leading writers in this country seems to be that while the scholastic theory of law (or the Natural Law theory) had some currency in the seventeenth and eighteenth centuries in Europe, it fell into desuetude due to the activity of the analytical jurists of the nineteenth century.² And if there is one observation that will apply to the thinking of all the recognized leaders of legal thought in this country, it is that none of them is disposed to accept what to him is an outmoded theory in his search for the eternal *raison d'être* of the Law. Pound sees the Positive Law as an instrument for asserting and preserving social interests.³ Cardozo views the Positive Law as an endless experiment involving social, economic, and political factors and the particular mores of the people affected by the Law.⁴ Llewellyn attempts to make of the Positive Law an element to be analyzed and probed in the laboratory of the physical universe, from which he hopes to emerge, like the chemist (or alchemist), with his conquered concepts contained in a mental test tube.⁵ Green observes the judicial process in operation and perceives it in transition from law to administration.⁶ Frank would like to effect a change in human nature because he finds adults laboring under a child-father myth which has found its way into and has colored adult thinking about the Law.⁷ That Frank has been unable "to see the forest because of the trees" follows from his impatience with the evidences which he finds expressed in the Positive Law, and in the attitude of the average man to-

¹ Cf. Proceedings (1935), Amer. Cath. Philosophical Assn.

² Pound, *Law and Morals* (1924).

³ *Ibid.*, and cf., *The Problem of an Ordered Society* (1932), 11 Tenn. Law Rev. 1.

⁴ *The Nature of the Judicial Process* (1921); Shientag, *The Opinions and Writings of Judge Benjamin N. Cardozo* (1930), 30 *Columbia Law Review*, 597.

⁵ *A Realistic Jurisprudence—The Next Step* (1930), 30 *Columbia Law Review*, 431.

⁶ *From Law to Administration* (1935), 13 *Texas Law Rev.*, 323; *The Administrative Process* (1935), 21 *A.B.A. Journal*, 708.

⁷ *Law and the Modern Mind* (1930).

gether with most lawyers and judges, that the Law has certitude and objectivity. This evil he attributes to infantile adulthood which is still suffering from a child-father complex. He borrows freely in this regard from Piaget, a behavioristic child psychologist. That there is uncertainty in the outcome of judicial investigation may well be true in the "twilight zone" of the Law, but that can be attributed to the frailty of human nature, the inadequacy of legal or legislative machinery, or the failure of the particular judge to apply a sound philosophy. To take a small segment of the vast field of the Positive Law, emphasize one factor in it that can be demonstrated by facts peculiar to that segment, and then generalize on the whole body of the Law, leads one to suspect that Mr. Frank is in sore need of some of the principles of formal logic which he decries with such a vengeance. If Mr. Frank had seen in man's consistent desire for certitude, for haven, for security (which the author contends cannot be found in the legal order in spite of a naive assumption that it does repose there) the age-old longing of man for the eternal verities, and not an over-developed infantilism, he would have been vastly closer to the truth.

In spite of the failure of contemporary legal writers to present a thesis which will be acceptable to proponents of a Neo-Scholastic philosophy of Law, one must be cautioned to avoid a complete indictment of them on that account. No one can deny the vast erudition, the painstaking research, and the genuine intellectual power of the men mentioned heretofore—and others who are following in their footsteps. It is patent to anyone who is acquainted with these men and their writings that they offer a challenge worthy of the mettle of the best minds. They are steeped in history, thorough in the Law and critical in their analysis. Anyone, then, who proposed to write on the Philosophy of the Positive Law from a scholastic point of view would commit his first error if he were to suppose that these writers are ignorant or biased. That assumption would serve only to discredit his own thesis. The simple fact is that the best considered writings coming from the pen of contemporary legal philosophers have very much in them that is in entire accord with scholastic principles. The Sociological Jurisprudence, to which Dean Pound has contributed so liberally of his vast learning, recognizes a criterion outside of the Law—a criterion

by which a particular rule may be judged and evaluated.⁸ Scholasticism holds that the Positive Law is not an end in itself, but only a means to an end. Thus the end of the Law cannot be found within itself (as the Analytical School of Jurists contended) but must be sought without the legal order. Pound then, in concluding for a norm outside of the Positive Law goes a considerable way along the road to Scholasticism. It is conceded, of course, that Pound's view of the function of the Positive Law would not have the unvarying ethical character that Scholasticism demands of it.⁹ However, the fact that he looks in vain within the Positive Law¹⁰ for an explanation and justification of itself, prompts him to accept the need of an end outside of the Positive Law. This conclusion again aligns him on the side of Scholasticism in opposing the absolutism of the state which the Analytical School fostered,¹¹ and which so easily can be employed by Communists and Fascists to justify their cancerous growth. So it is with many of the other writers.¹² Their analyses have led them to accept some premise (such as Frank's recognition of man's desire for certitude and security) which is on all fours with Scholasticism. To reconcile the points of departure is the task which confronts the advocate of neo-scholasticism in the Philosophy of Law.

The foregoing has been by way of preface to a few thoughts on the subject of Legal Writing as a part of the Catholic Law School Program. This writing must be done—not to gratify the writer's vanity, not to advertise the law school with which the writer is associated, not solely in defense of scholasticism as a system of philosophy—but especially by way of warning! The intelligent people of this country are entitled to know of the ugly and sinister intellectual and social revolution that is threatening in the western world! Any writer must recognize that the field of the Positive Law is closely related to the larger field of social conduct in general. The lawyer of tomorrow must be

⁸ Pound would seem to deny the external character of the criterion. Cf. *A Comparison of Ideals of Law* (1933), 47 Har. Law Rev. at page 3. It must be noted, however, that Pound was referring to the Law as "systems of Law" or "justice according to Law." *Ibid.* at page 1.

⁹ *Ibid.* at page 15 *et seq.*

¹⁰ Cf. *Law and Morals*, p. 48, for a criticism of the Analytical School.

¹¹ *Ibid.*, at page 14.

¹² Cf. Llewellyn, *Some Realism about Realism* (1931), 44 Har. Law Rev. 1222.

brought to a larger concept of his professional duties and qualifications than the lawyer of yesterday. Thus the legal writer must anticipate this new order. He will have to include in his thinking the fact that the civilization of the western world was founded upon the idea that man has certain *inherent* rights (*qua* man) which rights antecede and antedate any form of government and which no government can rightfully proscribe. The Constitutions of our republic recognize this proposition. All of these constitutions expressly recognize that the powers granted to the government do not constitute the sum-total of legitimate authority. They recognize that certain prerogatives have been and still are retained by the people, and herein reposes the conclusive answer to those who contend for an absolute or totalitarian state. The influence of the legal profession upon our legal and political institutions cannot be denied. Therefore the imminent danger contained within a philosophy of law that contends for a totalitarian state must be exposed with all of its vicious implications. The impression that a particular law or ordinance must be *right* because it is *legal* is one of the most treacherous doctrines that has been promulgated in modern society! It justifies materialistic capitalism, it espouses communism and Fascism, and it reduces man, the crowning glory of creation, to a legally ordained puppet! This is the impending intellectual revolution! Its successes have been too long unresisted! It falls to those who can to combat it with all of the power and strength of intellect that can be mustered up. Truly here is a challenge worthy of an Aquinas!

To the end that a well-rounded program of Legal Writing may be effected, it seems advisable that those Catholic law schools which have Reviews dedicate them to this labor. This dedication need not entail a surrender of desirable features which are now incorporated in these Reviews, such as Notes and Comments, Contemporary Legislation, Book Reviews, and so on. A plan similar to that now employed by the Duke University Law School in its *Review*, wherein a particular issue is devoted to a large subject with special aspects of the subject treated by experts in that field, or the method of *The Annals*, might be advisable for the propagation of neo-scholastic principles in the field of the Positive Law. Subjects should be selected and assigned to men of ability and their cooperation solicited. That

such men are available, eminently qualified to advance this project, is manifest. The names of Dr. Fulton Sheen and Dr. Charles Hart of Catholic University, Dr. John A. O'Brien of the University of Illinois, Professor Walter B. Kennedy of Fordham Law School, Dr. Charles C. Miltner of the University of Notre Dame and Francis Naphin of the Chicago Bar instantly come to mind. And there are numerous others not within this writer's personal knowledge whose cooperation could be secured. A long-time plan should be worked out so that momentum once gained will be sustained. It is the duty of the Catholic law schools to accept their rightful position in the vanguard of Legal Writing predicated upon the principles of neo-scholasticism.

CONCLUSION

The subject undertaken by this paper would not be complete without a few concluding remarks in answer to the question: Why should a distinctly *Catholic* law school be developed? At the outset, it would be a very short-sighted and inadequate view to look upon Catholicism as a mere sect—a form of religious belief, or worship. In a sense, it is that, but it is also very much more. Catholicism embodies a distinct *culture*—it is in truth, a way of living. It contemplates life in its totality and lays down a rule of action whereby the fullness of life may be achieved. It is intensely preoccupied with human conduct and its direction in a manner most agreeable to the dignity of man. In short, with deep wisdom, with profound understanding, and with vast perspective, it supplies the answer to man's eternal quest for truth. (Care should be exercised, however, to avoid the confusion of the doctrines of Catholicism and the *opinions* of various officials of the Catholic Church, the latter of which are sometimes untrue and erroneous, and are thus imputed to Catholicism as a system of thought for the purpose of discrediting the whole system.)

There is ever increasing agitation today for a closer coordination between the field of the Positive Law and the so-called Social Sciences. It is recognized that the Positive Law is not an independent and isolated process of thought unrelated to the other aspects of human conduct. More and more are the law school curricula becoming "socialized." The "functional approach" to the study of law so vigorously employed at Columbia

University has served to emphasize the fact that the limpid purity of legal refinement is often rudely rebuffed in the forum of everyday human relations. Of course, National Prohibition was a "legal" law, but its unenforceability was a "social" fact! For the reason then that Catholicism has probed deeply into human relations, into the nature of man, his origin and his end, it is but good sense to inquire of this ancient yet ever modern repository of wisdom in our search for the solution to the grave social, economic, political, and moral problems that afflict us.

The shift in emphasis which is discernible in the writings of those who are delving into the philosophy of the Positive Law from law as a system of thought to law as a force in society gives emphasis to the extent to which the social implications of the Positive Law have developed. Since Catholicism has some very definite doctrines relative to the nature of human society and man's place and function therein, it follows that the teaching of the Positive Law should, at least in those law schools that are convinced of the truth of Catholic doctrines, be interwoven with the philosophy of Catholicism. And this, not because it is Catholic, but only because it is true.

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ON THE TRAINING OF CHILDREN

From early childhood an effort should be made to train children toward independence. We come into the world alone and we leave it alone and, as we are more or less alone during life, the more we accustom ourselves to this particular phase of existence the less likely we are to be lonesome.

Cultivate in children a taste for the simple things of life—love of God and of His creatures, appreciation of the beauties of His creations, and above all "character," that backbone of civilization without which it cannot long endure. Do not pamper them with expensive toys and elegant clothes. Emphasize that cleanliness is next to godliness, not only physical cleanliness but moral cleanliness. Teach them not to despise honest toil but rather to prize it—that "To labor is to pray."

Impress on their minds continually that just because someone else does a thing does not make it right and that their own good example will bring its own reward in an increase of self-respect and will encourage others to do what is right.

Keep them away from the "movies" as long as possible—their influence in these times is rather devastating—and do not allow them to overindulge in sweets. "Muscle of mind and character is not built on a diet of chocolate and vanilla."

Exercise should be encouraged by various sports, particularly swimming. Dancing is also a splendid form of exercise which develops poise and grace and which teaches children the beauty of rhythm not only in the dance but in life itself. Do not, however, exploit them should they have a special talent, as they will soon lose their innocence and loveliness.

As the girls graduate from dolls and enter a more mature world, watch them carefully lest they get the wrong viewpoint on life. Do not allow them an overindulgence in romantic novels, as this is just as devitalizing as an overindulgence in sweets, for many of such novels awaken desires which can never be fulfilled. Encourage them to read biographies. It need not be "The Lives of the Saints" but of those who fought the good fight in the world and won their crown of glory. Books of travel and history are also to be recommended.

Make them realize their responsibility to God and to man—that they were placed on this earth to know God, to love Him,

and to serve Him, and that the surest way of fulfilling this obligation is to concentrate on the work He has given them to do, no matter how humble, and to do it to the best of their ability. We cannot all be heroes and heroines, but we can be an important cog in the wheel of life.

Educate them to the best of your ability, but be especially careful in your choice of the institution. Be sure that the ideals instilled there will be of the highest and that, no matter what profession they may choose, these ideals will remain with them as guide-posts along the highway of life.

Do not be too strict with them and do not be constantly worrying about them. Recently a friend stated that when he was young he was never able to go anywhere and thoroughly enjoy himself because he knew his mother would worry until he got home. "Now," he said rather ruefully, "she is gone and no one cares particularly whether I come home or not, but I have lost the desire to go"—which seemed rather pitiful.

Do not "nag" or cherish a disapproving attitude. Try to cultivate an "understanding heart." One needs to nowadays more than ever. The youth of today encounters so many temptations and is lulled into acquiescence by the slogan, "Everyone is doing it." Rather than endeavor to show them the seriousness of the offense it would be more efficacious if you could prove to them how ridiculous they are—that life is so precious and so short it should be considered a priceless heritage not to be thrown away for a "mess of pottage."

Love your children, but do not expect or demand it in return. Did you ever read Francis Thompson's poem, "Love and the Child."

"Why do you so clasp me,
And draw me to your knee?
Forsooth, you do but chafe me;
I pray you let me be:
I will be loved but now and then
When it liketh me!"

"Thus I heard a young child,
A thwart child, a young child
Rebellious against love's arms,
Make its peevish cry.

"To the tender God I turn:
'Pardon, Love Most High,
For I think those arms were even Thine
And that child was even I.'"

We are all children in the sight of God, and when we realize how little gratitude and love we give Him in return for His loving kindness you should not expect too much of your own children.

Do not for a moment give in to discouragement or disparagement. Yours is a noble work and, while it may seem to be all in vain, the results will show when and where you least expect it. The value of a good example cannot be overestimated—it is the mightiest weapon in the world today against the forces of evil. Remember:

"Thou must be true thyself;
If thou the truth wouldst teach,
Thy soul must overflow if thou
Another's soul wouldst reach!
It needs the overflow of heart
To give the lips full speech.

"Think truly, and thy thoughts
Shall the world's famine feed;
Speak truly, and each word of thine
Shall be a fruitful seed;
Live truly, and thy life shall be
A great and noble creed."

ELLEN LUCEY.

EDUCATIONAL NOTES

NOTABLES AT MASS ON ANNIVERSARY OF POPE'S CORONATION

Distinguished ecclesiastics, diplomats from a score of foreign countries, persons distinguished in the civil life of the United States, and prominent citizens from this and other cities were present at a solemn Pontifical Mass celebrated in the crypt of the National Shrine of the Immaculate Conception, Washington, February 12, to mark the sixteenth anniversary of the coronation of His Holiness Pope Pius XI.

His Excellency the Most Rev. Amleto Giovanni Cicognani, Apostolic Delegate to the United States, was celebrant of the Mass.

In an eloquent sermon, the Most Rev. Gerald P. O'Hara, Bishop of Savannah-Atlanta, reviewed the tremendous activity of the Holy Father for the benefit of the entire world. Occupying places near the altar were the Most Rev. John M. McNamara, Auxiliary Bishop of Baltimore; the Rt. Rev. Msgrs. Joseph M. Corrigan, Rector of the Catholic University; and Michael J. Ready, General Secretary of the National Catholic Welfare Conference; Patrick McCormick, Vice-Rector of the Catholic University; John A. Ryan, Director of the N. C. W. C. Department of Social Action; Peter Guilday, Francesco Lardone, Edward Jordan of the Catholic University, and Eugene Connelly, rector of St. Peter's Church, and the Very Rev. Arthur A. O'Leary, S.J., President of Georgetown University. Also occupying places near the altar were the Very Rev. Msgrs. Francis Hyland and Leo Binz, of the Apostolic Delegation staff.

Occupying special places were the Ambassadors of Poland and Italy, the Ministers of Austria, Albania, the Irish Free State, El Salvador, Latvia, Lithuania and Haiti, the Charge d'Affaires of Venezuela and other diplomats representing Argentina, Chile, Belgium, Germany, France, Jugoslavia, Czechoslovakia and other countries.

Still others present included Senator David I. Walsh, of Massachusetts, Representative Virginia Jenckes of Indiana, United States Minister to Ecuador Antonio C. Gonzalez and Dr. Hugh Taylor of Princeton University, a member of the Pontifical Academy of Science.

Bishop O'Hara concluded his sermon by asking the Apostolic

Delegate to convey to the Holy Father "the tribute of our devotion, the tribute of our loyalty, the tribute of our love." "In the whole world," he added, "there is not a more loyal, a more devoted Catholic people than the Catholics of the United States."

Saying that on the very day that the election of Cardinal Achille Ratti to "the highest office on earth" was announced in Rome 16 years ago there was a notable sign of unusual gratification, Bishop O'Hara reviewed the Holy Father's "amazing pontificate."

"We are assembled today," Bishop O'Hara said, "to renew our pledge of loyalty to him who is the Chief Shepherd of the flock." He reviewed the rapid rise of His Holiness from the quiet librarian's life to the most exalted throne on earth, and his indefatigable labors as the successor of St. Peter. "The Holy Father," he said, "has manifested deep interest in every department of the Church's work." "There isn't," he added, "an interest relating to man's spiritual or material welfare which has not at one time or another in the last 16 years received the personal consideration of Pope Pius XI. No concern of the Church has been too small to claim his attention."

NORMAL COURSES IN THE JUSTINE WARD METHOD

June 15th to July 29th

Normal Courses in the Justine Ward Method will be given at Webster College, Webster Groves, Mo., 1938 Summer Session. Webster College is the mid-western center for the training of supervisors and teachers in the Ward Method. The Courses scheduled to be given under the direction of Mr. Edmund M. Holden are as follows: Music I; Music II; Music IV (Gregorian I) Liturgies; Gregorian II; Practice Teaching in the Ward Method.

WHAT CAN I DO FOR WORLD PEACE?

You can begin now by—

1. Acquainting yourself with the program of the Catholic Association for International Peace and working with it.
2. Studying the pamphlets and outlines of the Association and helping others to know them.
3. Organizing a small study group in your community using this material as a basis.

4. Knowing through this means what are the Catholic principles in international problems.
5. Consulting your pastor on having a Peace Pamphlet Rack in the rear of your church.
6. Cooperating with local peace groups that have constructive programs.
7. Arranging for lectures, debates, discussions on current world affairs.
8. Becoming a member of the Catholic Association for International Peace and assisting in the promotion of its activities.
9. Attending conferences, forums, lectures on world questions.
10. Understanding the relation of world peace to national economic and social problems.
11. Knowing what is right and what is wrong regarding war and peace.
12. Arranging for meetings in your organization and community for discussion on international matters.
13. Reading best books, pamphlets, periodicals and newspapers on world affairs.
14. Using your influence for world peace in your home, your organization, your community.
15. Arranging for display of peace literature in your schools, club rooms, libraries and community centers.
16. Promoting through the local press, radio, movies, plays, etc., Christian ideals on world peace.
17. Relating international questions to special courses in the school curriculum.
18. Securing literature, study outlines, references and aids in carrying out these suggestions from the Catholic Association for International Peace.
19. Working closely with the National Council of Catholic Men and National Council of Catholic Women in your locality.
20. Knowing the relation of world peace to the teachings of the Church through its Liturgy and Papal Pronouncements.
21. Becoming a leader of the Catholic Peace Movement and making action for peace—Catholic Action.
22. Creating the idea of peace within yourself and extending it to others with whom you come in daily contact.
23. Praying for world peace and the restoration of "the Peace of Christ in the Kingdom of Christ."

Write today to—The Catholic Association for International Peace, 1312 Massachusetts Avenue, N. W., Washington, D. C.

COLLEGE COMPETITION FOR STUDENTS

In the Thirty-second Annual Report of the Carnegie Foundation, President Walter A. Jessup discusses the intensive competition now carried on between colleges for the recruiting of students.

"We are familiar with the 'inducements' offered to promising athletes, but we may be astonished by the fact that drum majors and tuba players now find themselves possessed of special talents with a marketable value in the college field. Jobs and scholarships are dangled before the eyes of impecunious high school pupils. Fraternities and sororities vie in recruiting students who can pay their bills and bring glory (in press notices) to a chapter. The evil thread which runs through the fabric of recruitment devices is the attempt through them to exploit the student.

"Many institutions," continues Dr. Jessup,

"today are giving renewed serious consideration to the selection of students adapted to their particular programs. The right selection of students, in accordance with a clear and understood institutional purpose, benefits not only the university or college that employs it but every undergraduate fortunate enough to enjoy its privileges.

"The president of a small college recently said, 'We know that we are accepting students who cannot do our work. We know that we are carrying these students forward to graduation. In our present situation we are under such pressure that we feel we have no other choice. Our campus morale is affected by numbers and a reduction in attendance is looked upon as a slump—as though the institution were losing ground.'"

Dr. Jessup writes:

"No college can be free from the necessity of competing with other institutions. The means adopted have perforce included some consideration of the relation of the college to the general public, for the typical college, beset on every hand with competition, must vie with its neighbors for public approval. In consequence, it has adopted devices common to other competitive social and economic enterprises. It has changed the nature of its catalog. It has employed publicity agents. It has pressed its alumni into service as recruiting officers. It has issued neat and none too modest printed matter to attract students. Its 'follow-up' system is often very efficient indeed. And it has deemed

itself forced to do these things by a feeling that it must struggle if it is to survive and go forward."

SURVEY OF THE FIELD

Members of the National Catholic Educational Association will receive early this month the February Bulletin of the Association which contains the preliminary program for the annual convention to be held in Milwaukee, April 20, 21, and 22. The attractive program that has been arranged for each department and section and the thorough preparations that are being made by an active local committee assure a most successful convention in Milwaukee. . . . A member of the faculty of the Catholic University of America here is being sent to England by the Carnegie Institution of Washington to press forward with a monumental work which has engaged his attention for some 20 years and which, when completed, will have a profound effect in the field of letters. The faculty member is Dr. Leo F. Stock, Associate Professor of American History, author of "United States Ministers to the Papal States," and during the World War Recorder with the National Board of Historical Service under the Committee on Public Information. The work is "Proceedings and Debates of the British Parliament Respecting North America," in which Dr. Stock already has brought out four impressive volumes, and which he estimates will require at least as many more volumes to complete. The purpose of this great work is to set down everything said and done in the English Parliament about America between the years 1542 and 1783. The fourth volume, brought out in 1937, brings the record up to 1729. Although there is much ground yet to be covered, and the references to America will become more extensive in some of the years yet to be treated, Dr. Stock already has done much of the research for this period. He expects to complete the remaining volumes in about 10 years. . . . When the school attendance record of any district is adversely affected by the fact that children stay out of school to observe religious holidays, such decline in attendance would not affect the apportionment of public moneys to that school district, under an amendment to the educational law of New York State introduced in the legislature by Senator Feld. "Whenever school attendance is adversely affected by religious holidays, and the existence of such

holidays is established to the satisfaction of the Commissioner of Education," the amendment says, "the Commissioner of Education shall in his discretion disregard the average attendance on such days in the apportionment of public money, and he may elect to substitute the average attendance of pupils for a like period just prior to the religious holidays." . . . The first annual convention of the North Central Regional Unit of the Department of Secondary Schools, National Catholic Educational Association, will be held in Chicago, April 6. The area includes schools in 22 States and representatives of more than 100 high schools have signified intention of attending. The theme of the meeting will be "The Educational Policies of Catholic Secondary Schools." The Rev. Julian L. Maline, S.J., of Milford Novitiate, Milford, O., chairman of the committee on speakers, has announced that three prominent mid-west educators will lead the discussion. . . . Its plans for the examination, evaluation and accreditation of Catholic schools of nursing have been announced by the Catholic Hospital Association of the United States. A joint meeting of Sister Examiners, of the Council on Nursing Education for the United States, and of the Professional Advisory Committee was held in St. Louis, February 16. A Conference on Examination, Evaluation and Accreditation, attended by Sister Examiners and the Council on Nursing Education, was held there Thursday, February 17. The program of examining Catholic schools of nursing was initiated immediately following this conference. . . . Canon George Lemaitre, Belgian priest and scientist and one of the world's three leaders in the mechanics of relativity, arrived in the United States last month from Louvain, Belgium, to assume his post as visiting professor of mathematics and physics at the University of Notre Dame. . . . The Rt. Rev. Msgr. Michael J. Ready, General Secretary of the National Catholic Welfare Conference, has been named by President Roosevelt to the Board of Visitors which will meet at the United States Naval Academy at Annapolis, Md., on April 25, 1938. . . . A campaign to raise \$1,500,000 for a new major seminary for the Archdiocese of Los Angeles was inaugurated by the Most Rev. John J. Cantwell, Archbishop of Los Angeles, in a pastoral letter. The seminary will be located in Ventura County just north of Los Angeles on a site of 100 acres donated by the late Juan Camarillo. . . .

The newly-founded National Federation of Catholic College Students unanimously voted the adoption of a constitution at a meeting held at Manhattanville College, New York, February 6. The Federation elected Robert Becker of Manhattan College as its first president, Miss Winifred Byles of Manhattanville College as vice-president, Miss Dolorita Curry of Mount Saint Vincent College as treasurer, and Patrick O'Shea of St. John's College as secretary. . . . A Personality Clinic was organized in the extension school classes of Providence College, Providence, R. I. Inaugurating a new branch of the Psychology Department, a course called "Personal Problems" was instituted to help smooth out quirks of personality. Purely a cultural course, and carrying no credit, it aims at the adjustment of the individual's perspective toward daily problems. . . . At a banquet in Cleveland February 8, attended by the Most Rev. Joseph Schrembs, Bishop of Cleveland, many priests and men and women representing educational and professional and commercial life, the Very Rev. Edmund C. Horne, recently appointed to the presidency of John Carroll University, was given a formal welcome to the city. . . . The World Congress of Catholic Teachers will open in Budapest August 16. The Hungarian General Inspector of Education, Andrew Zibolen, will preside. Among the speakers will be Dr. Julius Kornis of Pazamany University, Budapest, and Dr. Johann Friedrich of Luxembourg. . . . The Very Rev. Francis W. Walsh, pastor of the Church of the Assumption, Peekskill, N. Y., has been selected by His Eminence Patrick Cardinal Hayes, Archbishop of New York, as President of the College of New Rochelle, according to announcement made by Mother M. Ignatius, dean of the college. Father Walsh recently was appointed a Diocesan Consultor and Dean of Westchester County. He was born in Newport, R. I., June 8, 1889, attended Holy Cross College, Worcester, Mass., and St. Bernard's Seminary, Rochester, and St. Joseph's Seminary, Dunwoodie, N. Y. He was ordained May 29, 1915. While serving overseas as a chaplain, he was gassed and spent a year in American and French war hospitals. Returning, he was assigned to the Cathedral of the Immaculate Conception, in Denver, and later established and became pastor of St. Vincent de Paul Church in that city. He returned to New York in 1932.

REVIEWS AND NOTICES

Canticle of the Three Children in the Fiery Furnace. Illustrated by Frances W. Delehanty. New York: Sheed and Ward. Price, \$1.50.

Here is a book which should delight the eyes and ears of children as well as adults who will place the book into their hands. It contains the song which the three children sang in the fiery furnace and is presented in Gregorian chant according to the method of Justine Ward to whom the work is dedicated.

Each phase of the song is appropriately illustrated. The pictures are beautifully drawn, possessing a whimsical, child-like character which will attract and hold any child's interest. The peculiar tilt of the elephant's trunk; the stoop of the shepherds as they follow the sheep over the hill; the quick movement of the dogs and cats and even the dancing angel with the tambourine gives the book a human quality of particular appeal. The book should be valuable to teachers who are cooperating with that great movement of teaching Gregorian chant to the lay person beginning in the proper stage of childhood.

F. V. MURPHY.

Biology, by U. A. Hauber and M. E. O'Hanlon. New York: F. S. Crofts & Co. \$3.90.

Principles of Biology, by G. Waddington and Monica Taylor. W. London: John Murray, Albemarle Street.

Since 1935, a healthy impetus has been given to the teaching of the beginning biological courses in American and English Catholic colleges by the appearance of two very unusual textbooks. By a singular coincidence each book represents the collaboration of a priest and a nun from different institutions. The American book is "Biology, a Study of the Principles of Life for the College Student," by Rev. Ulrich A. Hauber, Ph.D., and Sister Mary Ellen O'Hanlon, O.S.D., Ph.D. The English work is "Principles of Biology," by Rev. G. Waddington, S.J., Ph.D., and Sister Mary Monica Taylor, S.N.D., Sc.D. The scientific position of all four authors amply warrants the importance and reliability of their work. Dr. Hauber, professor of biology at St. Ambrose College, Davenport, and a graduate of the Uni-

versity of Iowa, has specialized in genetics. His contributions in the field of scientific thought have been a welcome addition to Catholic periodical literature. Dr. Mary Ellen O'Hanlon is one of the best known authorities on the bryophytes in this country. A graduate of the University of Chicago and professor of botany at Rosary College, River Forest, Illinois, she has been a consistent and prolific producer of research papers in national botanical publications. Rarely a winter meeting of the Botanical Society of America goes by that she does not personally announce the results of her research on some new problem. Dr. Waddington was formerly lecturer in biology at Stonyhurst College. He now holds the chair of biology at Heythrop College in Oxford. Dr. Monica Taylor is principal lecturer in science at the Notre Dame Training College, Dowanhill, Glasgow, Scotland. The results of her research on the protozoa have been appearing for years in the English journals. Her laboratory technique has been widely copied, and the methods she has developed appear in the best micrologies. Incidentally, she is a member of the same old Welsh Catholic family which has given to American education Dr. Austin Taylor of New York University, and Dr. Hugh M. Taylor, the professor of chemistry at Princeton, who was recently appointed to the Pontifical Academy of Science.

The Waddington-Taylor book appeared in 1935, but, unfortunately, received little attention in this country. It is so profoundly and thoroughly scientific that one wonders at its dedication to the children "who are at an important period in their lives." It would give even the average American freshman exceedingly tough sledding. Although it is absolutely Catholic throughout, and quite conservative at times, to this reviewer it seems to parallel rather closely the general outlines of that great progenitor of a long race of biological textbooks, "The Course of Practical Instructions in Elementary Biology," by Thomas Huxley and H. N. Martins, which first appeared in 1877. It is to be hoped that the valuable contribution by Father Waddington and Sister Monica will soon receive the attention it so richly merits in this country, not only for itself, but also as a companion reference to the more recent work by our own Father Hauber and Sister Mary Ellen.

The appearance of the Hauber-O'Hanlon text is, in the opinion of this reviewer, one of the most profoundly significant Catholic

literary events in the United States since the appearance of the Catholic Encyclopedia. To say that it marks the end of one era in the educational coming-of-age of American Catholicism may sound far-fetched. A careful reading of the book, we think, will go a long way to substantiate the proposition.

Father Hauber and Sister Mary Ellen have not departed from the more traditional organization of a general biology text. They have rather capitalized on the sound pedagogical features of many now in use, and, by skillfully weaving them together, have produced an eminently teachable work. They have stressed the importance not only of forming really scientific habits of approach, but also of cultivating an extensive technical vocabulary from the start, thus evidencing a distinctly practical appreciation of the most difficult problems confronting the science teacher.

Their book, however, must not be dismissed as a mere classroom or laboratory manual. It will appeal to a much wider range of educational and philosophical interest. The large body of the clergy, the sisterhoods, and the intelligent laity, who are wondering just how the teacher of biology approaches his difficult task in a Catholic college, would do well to give this work careful attention. While methods of approach, individual techniques, and personal classroom idiosyncrasies may vary with every instructor, it is to be doubted if there are many Catholic colleges in the country in which the content of the general course in biology is markedly different. As a reliable reference, therefore, in a field long regarded by Catholics as an area of major educational difficulty, the book unquestionably merits a place on the most modest 5-foot shelf of Catholic books in the rectory, the convent, the office, or the home.

First editions of pioneer works in any field are rarely flawless. The book is no exception to the rule. This reviewer regrets the omission of any reference to the serological research of Karl Metz, the Königsberg school, and their followers, in the study of possible phylogenies of living forms. Together with the recently developed techniques based on the decreasing radioactivity of paleontological remains, they constitute some of the most interesting and possibly significant contributions to modern theories of transformism. The ecological aspect of biology is quite adequately treated for a work of this type. This reviewer, however, is very much inclined to place greater stress on the

conservation problem. In a day and age when so many national resources are still either stupidly neglected or thoughtlessly being depleted, it would seem the duty of every textbook designed to form the social consciousness of future generations to stress to the limit their responsibility to their successors for the natural blessings they now enjoy.

These omissions are the more noticeable since the authors have made such a laudable and, on the whole, successful effort to lift this book out of the prosaic class of traditional treatises by orienting the biological sciences in their proper relations to the other elements of general culture. For this latter reason alone the book should be an indispensable adjunct to the more theoretical branches of modern learning, particularly psychology, education, and sociology.

It is hard for a Catholic biologist not to be prejudiced in favor of the book. Most judiciously it says the very things we wanted to have said for many years. That it says them, too, exactly where they ought to be said, in connection with the mooted points under discussion, is admirable. It took courage to upset the so-called "objective" view of scientific statement, and to explain Catholic teaching or practice wherever the context seemed to demand it. The authors must realize that in so doing they will run the gauntlet of criticism, all the way from the hypercynicism of the scientifically emancipated down to the anthropomorphic superstitions of the "Bible Belters."

It is, perhaps, unfortunate that the insensate scramble of publishing houses to glut the market with competing textbooks may let loose on an up-to-now sufficiently bedeviled teaching body a whole flood of questionably "Catholic Biology Texts." It would do much more good if the present authors, especially in conjunction with their English contemporaries, would be permitted to remain the unofficial spokesmen in their field for at least the next ten years. During this period the minor shortcomings of their book could be pointed out, additions could be suggested, and changes made. A subsequent edition of this valiantly worthy first effort would then have a chance to become the really classic text in a literature that will do honor to the Church and the science that jointly sponsored it.

St. Norbert College,
West DePere, Wis.

ANSELM M. KEEFE, O.Praem.

The Society of the Sacred Heart in North America, by Louise Callan, A.M., Ph.D. New York: Longmans, Green & Co. Pp. 772. Price, \$5.00.

This volume is far more than a record of the method, labor and achievement of the Society of the Sacred Heart on the North American continent. It is a scholarly, invaluable contribution to that great glory of the Catholic Church in America—the development of a complete system of Catholic education from kindergarten to college level.

Born at the dawn of the nineteenth century, to recreate Christian education in the waste left by the French Revolution, the Society of the Sacred Heart was a ready and fitting instrument for pioneer work in the New World. Bishop Du Bourg's request for a band of teachers met with a generous response from the youthful, eighteen-year-old Society and St. Madeline Sophie gave of its best when she placed in charge of the spiritual adventurers in a strange land the ardent and indomitable Philippine Duchesne.

To Philippine Duchesne this invitation confirmed an insistent call to missionary labors, a conviction that enabled her to lead in the conquest of disappointments, delays, physical and spiritual hardships and heavy manual labor incident to the early foundations in Missouri and Louisiana. The goal of her missionary zeal was not reached until the Society opened its mission school among the Pottawatomie Indians in 1841. Although spent in body, she gave to the undertaking joy of soul and that spiritual quality which has won the pronouncement of the Holy See on her "heroic virtue."

Throughout the volume, the author uses source material with the accuracy of the scholar and skill of the artist. The actors in this drama of Catholic education, religious, priests, prelates, are virile personalities, living, moving, impelled by a common aim amid the changing scenes and conditions of America, from frontier days to the cultured civilization of the twentieth century. An interesting appreciation of these progressive stages to which education was necessarily adapted, given by Reverend Mother Digby during her visit to America in 1898-1899, is found on page 761.

It may come as a surprise to many that the Society of the Sacred Heart "laid foundations for parochial education in prac-

tically every city to which they were invited." Free schools and orphanages were an integral part of their work until "the development of the parochial school system and the introduction of teaching sisterhoods whose chief work lies in this field led the Religious of the Sacred Heart gradually to withdraw in order to devote themselves to the special activity for which they were destined by their foundress, namely secondary and higher education."

The story of the internal struggles and development of the Society of the Sacred Heart parallels that of the foundations in North America and runs through the entire volume. Three chapters, however, "Old World Origins," "Internal History of the Society, 1820-1852," and "The Educational System of the Society of the Sacred Heart," are especially enlightening as to the spirit and method by which, through stress and strain, their watchword, "One heart, one soul in the Heart of Jesus," was maintained and triumphed.

The "Introduction" by Rev. Gilbert J. Garraghan, S.J., points out the highlights of this interesting book and justly concludes that "any future history of education in the United States and Canada making claim to adequacy of treatment must put to account the fund of educational data set forth in this volume."

MARY G. HAWKS.

A Survey of Civilization, Part I—to 1300; Part II—since 1300, by Albert Sheppard, Ph.D., and Noel Davis Godfrey, J.D., Ph.D. New York: Longmans, Green & Co. Pp. 307, 397. Price, \$1.20 and \$1.00.

Professors Sheppard and Godfrey in these two paper-bound brochures have attempted, and I believe with astounding success, to give a key to the development of civilization from its roots in the earliest times to the living present. It is intended as a guide for students in the general informational survey of history which most colleges have placed in the freshman year; but it is a serviceable key for the high school teacher or the general reader who would learn something of ages, countries, and men and how they have contributed to the rise of modern culture. There is a recognition of history's handmaidens among the other social sciences and the importance of moral and re-

ligious heritages as well as of science and inventions and of legal codes and economic systems.

The period from earliest man to the Renaissance is divided into twenty-six chapters which such typical headings as the Evolution of Historical Writing, Relations between History and Geography, Early Institutions, Egypt, Tigris—Euphrates Valley, Interrelated Peoples of Western Asia, The Rise of Christianity, Monasticism, Barbarian Civilization, Crusades, etc. For each topic there are a few well written, suggestive pages emphasizing ideas and their correlation followed by a topical outline with references to the more widely used college texts and to an occasional special study. This in turn is followed by a score of volumes for further or specialized reading.

In quite the same fashion the second volume has thirty-two chapter headings as the Renaissance, Age of Discovery, Reformation, Growth of the National States, Age of Enlightenment, the French Revolution, Napoleonic Era, Era of Metternich, Industrial Revolution, World War, Peace Movements, and Dictatorships. There are a few maps and tables of dates.

The tone is tolerant. There is as reasonable detachment as is possible without being lukewarm in stirring issues. Possibly, the tone is too cautious, but texts must be almost as conservative as colleges which only gradually catch the spirit of the times. One might anticipate more references to Catholic authorities especially at the end of certain chapters; but this would hardly be a fair criticism for there is a paucity of college texts and special studies in English by Catholic writers. Indeed, there is an unfortunate lack of practical interest in American Catholic universities in mediaeval studies.

RICHARD J. PURCELL.

Books Received

Educational

Carnegie Foundation for the Advancement of Teaching. Thirty-second Annual Report. New York: Carnegie Foundation for the Advancement of Teaching. 522 Fifth Avenue. Pp. 202.

Cartesio Nel Terzo Centenario Del. "Discorso Del Metodo." Milano: Societa Editrice "Vita E Pensiero." Pp. 807.

Gesell, Arnold, Ph.D., M.D., and Thompson, Helen, Ph.D.: *The Psychology of Early Growth*. New York: The Macmillan Company. Pp. 290. Price, \$4.00.

Gray, William Henry, Ph.D.: *Psychology of Elementary School Subjects*. New York: Prentice-Hall, Inc. Pp. 459. Price, \$3.25.

Moehlman, Arthur B.: *Social Interpretation*. Principles and Practices of Community and Public-School Interpretation. New York: D. Appleton-Century Company. Pp. 485. Price, \$3.00.

Où En Est L'Enseignement Religieux. Paris: Éditions Casterman, 66, Rue Bonaparte. Pp. 499.

Stanger, Margaret A., M.A., and Donohue, Ellen K., B.S.: *Prediction and Prevention of Reading Difficulties*. New York: Oxford University Press. Pp. 101. Price, \$2.00.

Textbooks

Ames, Maurice U., and Jaffe, Bernard: *Laboratory and Workbook Units in Chemistry*. New York: Silver Burdett Company. Pp. xiv+247. Price, \$1.12.

Black, Newton Henry and Davis, Harvey Nathaniel: *Elementary Practical Physics*. New York: The Macmillan Company. Pp. 710. Price, \$2.00.

Blough, Gideon Light, M.A.: *My Career Book*. New York: American Book Company. Pp. 116. Price, \$0.32.

Bowman, Earl C. and Boston, Paul F.: *Living Safely*. New York: The Macmillan Company. Pp. 177. Price, \$0.52.

Boyer, Philip A., Cheyney, W. Walker and White, Holman: *The Progress Arithmetics*. Book E. New York: The Macmillan Company. Pp. 189. Price, \$0.48.

Clark, John R., Otis, Arthur S., Hatton, Caroline and Schorling, Raleigh: *Modern-School Arithmetic*. New Edition, Seventh Grade, Eighth Grade. New York: World Book Co. Pp. 292; 308. Price, \$0.76 each.

Clarke, Frances E., and Keelor, Katherine L.: *Our Town and City Animals*. Book V. Boston: D. C. Heath and Co. Pp. 218. Price, \$0.76.

Cowan, Anne Louise: *Consumer Mathematics*. Harrisburg, Pa.: Stackpole Sons. Pp. 324. Price, \$1.23.

Dance, E. H., M.A.: *The World Before Britain*. New York: Longmans, Green and Co. Pp. 244. Price, \$1.20.

Falque, Rev. Ferdinand C., S.T.B.: *High School Religion Series. Vol. I—God Our Creator.* New York: Benziger Brothers. Pp. xxxii+237.

Gard, Carroll, M.A.: *Writing Past and Present.* New York: The A. N. Palmer Company. Pp. 74.

Geography for Today. *At Home and Abroad; Southern Continents.* New York: Longmans, Green & Co. Pp. 243; 404. Price, \$1.36; \$2.00.

Glenn, Paul J., Ph.D., S.T.D.: *Theodicy.* St. Louis: B. Herder Book Co. Pp. 300. Price, \$2.00

Graves, Clarus, O.S.B.: *Man Goes on Trial, The Great Theatre of the World, Morality Play of Everyman.* Collegeville, Minn.: St. John's Abbey. Pp. 86; 41; 44. Price, \$0.50 each.

Gruenberg, Benjamin C. and Unzicker, Samuel P.: *Science in Our Lives.* New York: World Book Co. Pp. xiv+750. Price, \$1.76.

Hatfield, W. Wilbur, and Others: *Practice Activities in Junior English.* Book One. New York: American Book Company. Pp. 160. Price, \$0.32.

Hayes, Bridget T., and Challman, Esther R.: *The Sure Way Composition and Grammar. The Sure Way Minimum Essentials of Correct English. The Sure Way Punctuation Book.* Minneapolis, Minn.: Correct English Service. Pp. 191; 210; 128. Price, \$1.10; \$1.00; \$0.59.

Higham, M. M. B., M.A., and Higham, C. S. S., M.A.: *Men Who Made Britain.* Book III. New York: Longmans, Green and Co. Pp. 192. Price, \$0.90.

Hilton, Eugene, Ed.D.: *Problems and Values of Today.* Boston: Little Brown and Company. Pp. 639. Price, \$1.60.

Janzen, Cornelius C., Ph.D., and Stephenson, Orlando W., Ph.D.: *Everyday Economics.* New York: Silver Burdett Co. Pp. xviii+512. Price, \$1.68.

Jenner, D.: *Zehn Ziehen den Rhein Hinauf. Franzl Besucht Berlin Die Ferien—Kolonie.* New York: Oxford University Press. Pp. 80 each. Price, \$0.50 each.

Keelor, Katherine L.: *On Charlie Clarke's Farm.* Book IV. Boston: D. C. Heath and Co. Pp. 196. Price, \$0.72.

Masters, Katherine W.: *The Pet Club.* Book III. Boston: D. C. Heath and Co. Pp. 223. Price, \$0.92.

Miriam Joseph, Sister, C.S.C., M.A.: *The Trivium Integrated*

With College Composition. Notre Dame, Ind.: Burgess Publishing Company. Pp. 135. Price, \$1.90.

Moore, Dom Thomas Verner, Ph.D., M.D.: *Principles of Ethics. Nursing Manual.* Philadelphia: J. B. Lippincott Co. Pp. 387.

Muir, Edwin: *Scott and Scotland.* New York: Robert Speller. Pp. 182. Price, \$2.00.

Nichols, Roy F., Bayley, William C., and Beard, Charles A.: *America Yesterday.* New York: The Macmillan Company. Pp. lvi+416. Price, \$1.40.

Sisters of Saint Joseph of Boston: With Gates, Arthur I. *Third Reader. Preparatory Book.* New York: The Macmillan Company. Pp. 88. Price, \$0.32.

Smith, Nila B.: *Helpers on a Boat; Dick Makes a Garden; Nancy's Apple Tree; Milk for the City; The Woodpecker Taps; Bears at Home; The Happy Bluebird; The Baker Makes Bread; Goldfish and Birds; Peanuts and Popcorn; King Lion; From Farm and Garden; The Fireman; All Kinds of Cars; Tom's Dog and Cat; Carl's Home.* New York: Silver, Burdett Company. Pp. 16 each. Price, \$0.12 each.

Sondergaard, Arensa, *Fuzzy Tail* (Primer). Boston: D. C. Heath and Co. Pp. 134. Price, \$0.72.

Tippett, James S., and Tippett, Martha Kelly: *Sniff.* Book I. *Paths to Conservation.* Book VI. Boston: D. C. Heath and Co. Pp. 184; 299. Price, \$0.80; \$0.88.

Wedgewood, A., and Higham, C. S. S., M.A.: *Founders of Cities.* Book I. New York: Longmans, Green and Co. Pp. 126. Price, \$0.70.

Wirth, Fremont P.: *Workbook for the Development of America.* New York: American Book Co. Pp. 250. Price, \$0.48.

Yoakam, Gerald A., Bagley, William C., and Knowlton, Philip A.: *Reading To Learn.* Introductory Book. New York: The Macmillan Company. Pp. 389. Price, \$0.88.

General

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